



# 2018 Annual Report

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# 2018 HIGHLIGHTS



**R\$ 28.1 billion**  
of net operating revenue

**R\$ 5.6 billion**  
of Ebitda

**R\$ 2.2 billion**  
in net income

**R\$ 2.1 billion**  
in investments



## + SECURITY

**33% reduction** in the frequency rate of accidents with own employees

**94% reduction** in the severity rate of accidents with own employees

**658 municipalities** included in the Safety Campaign with the Population

**More than 14,000** safety inspections



## + QUALITY

**9,800 automatic reclosers** installed through the end of 2018

**8% improvement** in SAIDI<sup>1</sup>

**18% improvement** in SAIFI<sup>2</sup>

<sup>1</sup> Measures the duration of supply interruptions.

<sup>2</sup> Measures the frequency of supply interruptions.



## + OPERATIONAL EFFICIENCY

### Robotic Process Automation (RPA)

- **40 robots** in operation
- **40,000** transactions carried out per month

**R\$ 47 million will be invested** in the implementation of the Advanced Distribution Management System (ADMS)



## + INNOVATION

**R\$ 47.3 million** invested in Research and Development

**12 companies** selected to participate in CPFL Inova, an open innovation and acceleration program

**R\$ 6 million** were generated in **business** with the participating scale-ups



## + SUSTAINABILITY

### Strengthening of the Sustainability Platform

- **13 value** levers
- **58 indicators** monitored, with performance targets
- **Integration of targets** with variable remuneration



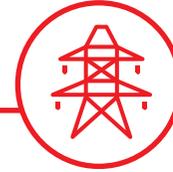
## GENERATION

**3,297 MW** of installed capacity  
in the generation sector

**95.6%** of renewable sources

**Inauguration** of the Boa Vista 2 SHPP

**Acquisition** of the Cherobim SHPP  
and the Gameleira Wind Farm Complex  
at the A-6 auction



## TRANSMISSION

**3 new projects**  
acquired in 2018

**R\$ 817 million**  
in expected investments

**More than 1,900 jobs**  
will be generated



## DISTRIBUTION

**4 distribution companies**<sup>1</sup>

**9.6 million** customers

**22 million** people served

**687 municipalities**  
in our concession area

<sup>1</sup>We completed the integration of RGE and RGE Sul on 12/31/2018.



## SOLUTIONS

Consolidation of integrated solutions  
offer on a single platform to generate  
value to customers.

**The new brand** is already born with  
**more than 1,600  
customers**

by the end of 2018



## CPFL UNIVERSITY

**R\$ 16.2 million** invested in professional development

**10 years** of CPFL University  
New brand and new portfolio

MORE THAN 624,000 HOURS OF TRAINING



<b>267,293</b>	School of Operational Excellence
<b>218,876</b>	Professional re-qualification
<b>56,134</b>	School of Excellence in Service
<b>35,374</b>	Distance Learning Tools
<b>31,149</b>	School of Business and Innovation
<b>15,870</b>	Leadership School



## ENERGY EFFICIENCY PROGRAM

**R\$ 67.6 million** in investments

**44 projects** completed and concluded with ANEEL, presenting the following indicators:

- **29 GWh saved** through the supported initiatives, equivalent to annual consumption of 12,000 residences<sup>1</sup>
- **2,248 tons of CO<sub>2</sub>** equivalent (tCO<sub>2</sub>e) avoided, which corresponds to the planting of 13,485 trees

<sup>1</sup> Considering the average monthly consumption of 200 kWh.



## CPFL INSTITUTE

Celebration of **15 years** of operation

**R\$ 32 million** invested

**128 municipalities** served

**7.4 million** people impacted online

**314,000** people impacted by social, cultural and sports activities

**600,000** followers in social networks

# CHAIRMAN'S MESSAGE

## 2018 Overview

The year 2018 marks a new milestone for CPFL Energia (CPFL) in its century-old history. Our 13 thousand employees have been employing their efforts to make CPFL a stable, reliable and credible electricity supplier in Brazil and many accomplishments have been fulfilled.

In the generation business, CPFL Geração has maintained its availability indicator at above 97%, which has been the benchmark for four consecutive years in the power generation sector in Brazil. CPFL Renováveis left no stone unturned in recovering and retrofitting the wind turbines with lower availability and utilization, and is now all set to be the major revenue contributor to the CPFL Group.

In the distribution business, our company has hit records in the regulatory performance indicators SAIDI and SAIFI, which have significantly reduced by 8% and 18% respectively. It is also worth mentioning that the culture of safety has been spreading across the company, resulting in satisfying outcomes in a whole year of operations. Regarding customer service, CPFL distribution companies won awards for the ANEEL Consumer Satisfaction Index (IASC) in 2018, which underscore the company's endeavor in diverse aspects of customer satisfaction.

The new brand of CPFL Soluções was launched to provide customized services to electricity consumers or prosumers.

In terms of corporate governance, the Board of Directors and Executive Board of CPFL witnessed a smooth and seamless transition with major changes in the membership of both boards. The best governance practices in Brazil and abroad were absorbed to enhance the decision-making mechanism and are surely leveraging our competitive advantage and potential.

With regard to financial results, CPFL posted gross revenue of R\$ 42.6 billion and EBITDA of R\$ 5.6 billion, growing 6.4% and 16%, respectively, year on year. These outcomes are records that obviously bring us further encouragement and inspiration.

## Future Outlook

As the largest electricity utility in the world and the parent company of CPFL, State Grid of China has been ranked No.2 in the Fortune Global 500 list for three consecutive years since 2016. The technical and managerial expertise of State Grid will provide strong support for the development of the CPFL Group. Since taking over CPFL, we have followed the market-oriented, long-term vision and operation localized strategy aimed at promoting CPFL's strength in its efforts to become the major player in Brazil's electricity sector. Taking into account the changing macro and micro environment and the development orientation, we drew up the new strategic plan for 2019-2023 in 2018 and redefined the company's Vision as below:

"We pursue to be the leading power utility in South America that supplies reliable electric energy and credible service in Brazil and pledge to forge the prolonged strength in developing business and innovation as well as corporate culture."

To make this vision come true, we will make tremendous efforts to provide reliable, accessible and sustainable electricity to all walks of life, and ensure a safer, healthier and prosperous life for people in regions where we operate. Quality of service is at the core of this and customer satisfaction will be the goal of all our endeavor.

## CPFL Energia will focus on **initiatives** related to **governance, core competence improvement** and **corporate culture inclusiveness** establishment aiming to leverage its competitiveness

We will also propel our business growth in a more strategic and competitive way, keep its dynamics and vitality, and create a more standardized, diversified and international corporate culture, while nurturing the company's legacy.

Innovation is at the center in this respect. We are open to comments and suggestions and welcome advice and solutions from all the internal and external inputs.

Furthermore, employees are our indispensable resources. A fair and transparent corporate environment will ensure the creativity and imagination of the CPFL team. We will protect the level playing field for each employee's growth and attract all talents to join CPFL as well.

### **2019 Outreach**

The year 2019 is challenging for us due to the transformation of the new economic strategy and policy of the new administration. We are optimistic about the revitalization of the Brazilian economy and are ready to contribute to the betterment of social well-beings.

CPFL will focus on 3C enhancement, which are Corporate Governance reinforcement, Core Competence improvement and Corporate Culture Inclusiveness establishment, so as to leverage the full potential of CPFL to boost its competence and competitive advantage.

As a multi-business and multinational enterprise in the Brazilian power sector, with rich experience and a valuable legacy, we must stimulate the new momentum for better

development and the pursuit of excellence. Corporate governance embodies good strategy and its decision-making supported by the hierarchy process of managerial activities, fast responding and determination are based on comprehensive analytic data and conclusion, the efficient management system and the aspiring work teams can underpin the foundation of success. Core Competence is the capability of acquiring success, such as safety of people and assets, reliability of power supply, profitability of operation, agility of management, sustainability of the company, etc., which should be conceived and nurtured by considering the certainty and uncertainty that the company is facing. With the importance of culture intelligence being widely recognized, CPFL needs to foster a Corporate Culture Inclusion with new characteristics. We will respect social norms and local culture, comply with the rule of law, inspire employees and continue learning from best practices and business models globally while forging this capability and embracing success.

Finally, on behalf of the Board of Directors of CPFL, I would like to extend gratitude to the outstanding management team and the industrious employees as well as all stakeholders for your steadfast support and substantial contributions. We will work together and strive to surpass new heights as pledged. I wish CPFL good luck and another fruitful year in 2019.

**Wen Bo**  
**Chairman of the Board of Directors**



# MESSAGE FROM THE CEO

CPFL Energia's activities in 2018 were focused on solidifying the growth plan that was outlined for the coming years, accompanying the major transformations in the power sector that are already underway. In our view, customer empowerment, advancing digitalization, increasing renewable sources, and expanding distributed generation will continue to shape how electricity companies will sustainably create value in their businesses.

In the distribution sector, the future points to increasingly intelligent and integrated networks. That is why we have made progress in digitalization and improvement of customer service channels. We have further enhanced our energy supply services, with historic outcomes in the SAIDI and SAIFI quality indicators, which assess the duration and frequency of interruptions. We also invested in the implementation of a new system for managing operations that will revolutionize the way we distribute energy to our customers.

We completed the integration of RGE with RGE Sul, intensifying the modernization of systems, increasing operational efficiency, and optimizing cost management. At the end of the year, we also received approval from ANEEL for the merging of the two concessions, creating the largest CPFL Energia distributor in the concession area, with 381 municipalities served and almost 3 million customers. This strategy is aligned with the changes we carried out in January 2018, when CPFL Santa Cruz brought together the operations of four other distributors (CPFL Jaguarí, CPFL Mococa, CPFL Leste Paulista and CPFL Sul Paulista).

In the generation segment, we have moved forward with our low-carbon strategy, with growth in generation from clean sources. CPFL Renováveis started commercial operations of the Boa Vista 2 SHPP, with an installed capacity of 29.9 MW. During the A-6 new energy auction, the Cherobim SHPP and the Gameleira Wind Farm

Complex were acquired, and are scheduled to start operating in 2024, adding 97.3 MW to the Group's generation base.

New opportunities are also appearing in the area of niche transmission. In June 2018, we won the auction to build the Maracanaú II substation, our first project in this segment located in the Northeast. In December, we successfully bid on another two lots, which include new substations and lines in the states of Santa Catarina and Rio Grande do Sul. Altogether, we will invest more than R\$ 800 million to get these projects off the ground.

In our non-regulated businesses, we launched CPFL Soluções, which consolidated the brands CPFL Brasil, CPFL Serviços and CPFL Eficiência. With this move, we now offer an integrated platform for customers seeking solutions in energy trading, infrastructure, energy efficiency and consulting. In addition, Envo, our distributed-generation arm for residential and commercial customers, celebrated one year of existence, with more than 250 clients served and with the expectation of expansion in the coming years.

We have strengthened our innovation culture with the consolidation of CPFL Inova, our startup acceleration platform that is already developing businesses capable of generating more productivity and improving the customer's experience with our services.

Altogether, we invested R\$ 2.1 billion in our areas of activity during the year. As a reflection of these advances and of the quality of management, we achieved record financial results for CPFL Energia: our Ebitda, an indicator that demonstrates the company's capacity to generate cash, totaled R\$ 5.6 billion, growth of 16% in relation to the previous year; using the same comparison, net revenue increased 5.2%, totaling R\$ 28.1 billion; and net income increased 74.2%, totaling R\$ 2.2 billion.

We continued **to grow in all our areas of activity**, achieved **record financial results** and strengthened the **alignment of our strategy** with sustainability aspects. These were some of the highlights in 2018

At our company, the way we generate value for our stakeholders and for society is as important as the financial results we deliver. That is why in 2018 we strengthened our Sustainability Platform, integrating it even further with Strategic Planning, as well as the Sustainable Development Goals and the principles of the UN Global Compact. Using this tool, we monitor 58 economic, social and environmental indicators, with periodic reporting to the Board of Executive Officers and the Board of Directors.

On the year marking 15 years of activity, we reached expressive numbers through the CPFL Institute, whose mission is to integrate social, cultural and sports activities in order to transform the reality of the communities where we operate. In 2018, "Café Filosófico" was watched by more than 950,000 spectators, and the CPFL Circuit reached 106 cities, with activities such as races, walks, cycling tours, solar cinema sessions, and music, benefiting 42,000 people. In the social area, reinforcing our vision of contributing to the development of society, we implemented 12 projects in 128 municipalities, impacting 230,000 people.

Our employees' dedication and commitment are essential for continuing to deliver these positive advances. We have intensified and consolidated the safety culture, resulting in the milestone of no fatal employee accidents and in the continuous improvement of indicators related to the frequency and severity of occurrences. We have also continued our efforts in this area through preventive campaigns to ensure the safety of the broader population.

In light of the transformations that the power sector is undergoing, it is essential that we train and develop talent in order to prepare them for this new scenario. That is why we redesigned the brand and the portfolio of courses and training sessions at CPFL University, which celebrated 10 years of existence. With annual investment of R\$ 16 million towards training programs, the new CPFL University strengthens the role employees can play in the development of their careers.

It is also important to highlight the sense of confidence that we continue to receive from State Grid, our controlling shareholder. As the world's largest energy company, the Chinese group not only supported our strategies and investments, but also joined forces to allow our teams to exchange professional and cultural experiences. Our expectation is that in the short term this relationship may prove to be even more effective, with the exchange of technologies and solutions that will further improve our performance.

Finally, we would like to thank Andre Dorf on behalf of our 13,000 employees for all his dedication and contributions to the CPFL Group's important achievements during his term in office.

Thank you to all of you,

**Gustavo Estrella**  
CEO of the CPFL Energia





# OUR BUSINESS

## 02.

The CPFL ENERGIA logo is displayed on the glass facade of a modern building. The logo consists of a stylized graphic of three curved lines above the text "CPFL" and "ENERGIA" stacked vertically.

CPFL  
ENERGIA

CPFL Energia headquarters  
in Campinas (SP)

# WHO WE ARE

We are a company that works in an integrated and vertical manner across all segments of the power sector, offering complete energy solutions. We are part of the State Grid Corporation of China (SGCC), the largest electricity utility in the world.

Our knowledge and business experience, coupled with the ability to plan and execute projects, results in financial strength, constant growth, and recognition of the company as one of the most sustainable and innovative in the industry. With a history spanning 106 years, we have contributed to Brazil's development, boosting the economy, providing people with well-being and quality of life, and transforming the future, always in integration with the environment and the communities in which we are present.

In early 2019, in alignment with State Grid, we redesigned our mission, vision, and values to better reflect the company's new guidelines and the evolving challenges in the power sector.

## MISSION



- We provide sustainable, accessible and reliable energy to all walks of life, and enhance a safer, healthier and prosperous life of people in regions where we operate.
- We propel our business growth in a more strategic and competitive way, keep its dynamics and vitality, and create a more standardized, diversified and international corporate culture, while nurturing its legacy.
- We protect the level playing field for each employee's growth and attract all talents to join CPFL.

## VISION

- We pursue to be the leading power utility in South America that supplies reliable electric energy and credible services.
- We pledge to forge the prolonged strength in developing business and innovation as well as culture.



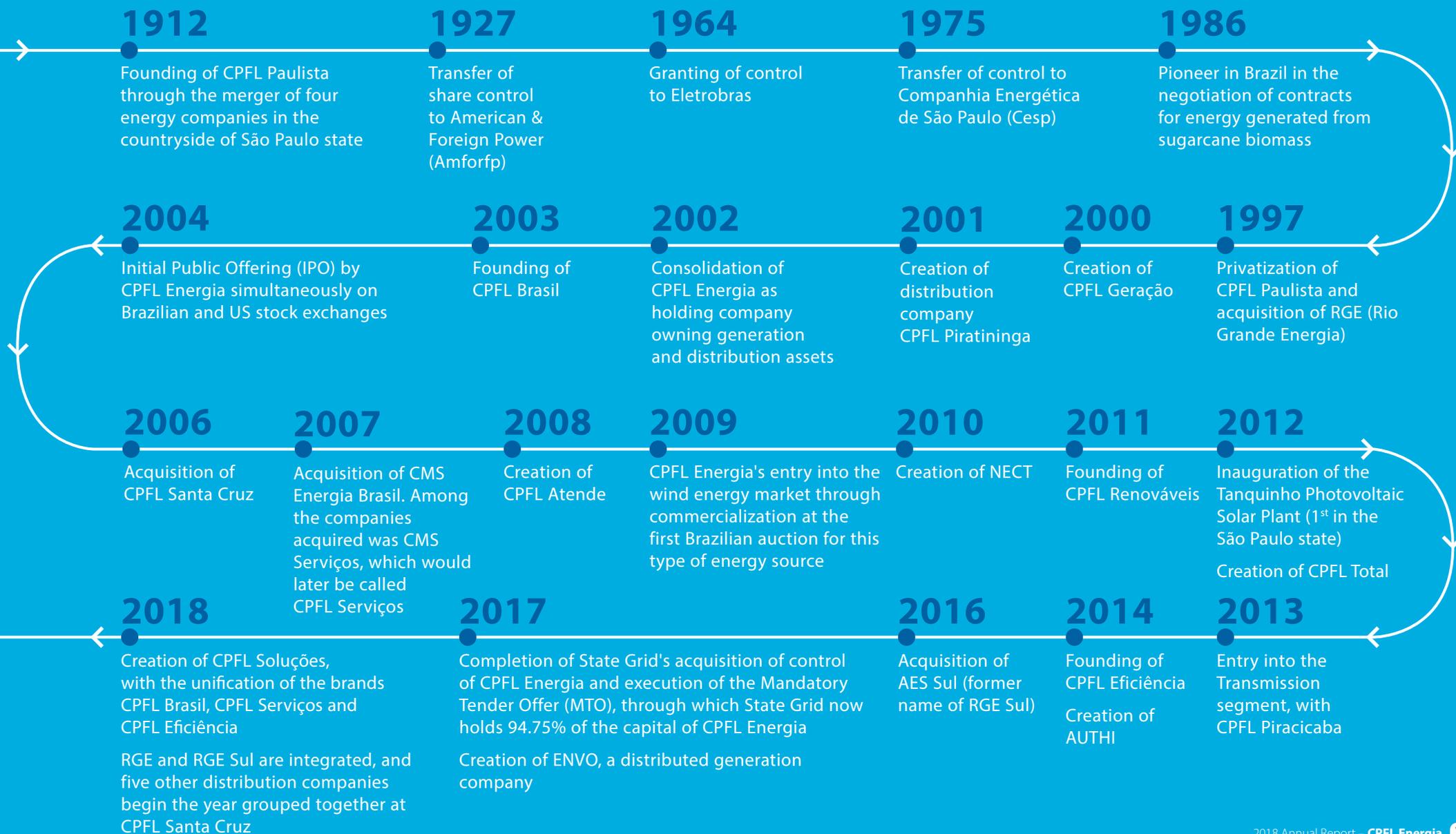
## VALUES



- For us, **safety** is a nonnegotiable commitment
- Our strength comes from **collaboration** among people
- We **innovate** to deliver the best solutions to our customers
- We strive to evolve always in the pursuit of **excellence**
- We are **ethical** and **responsible** in all we do to deliver sustainable results

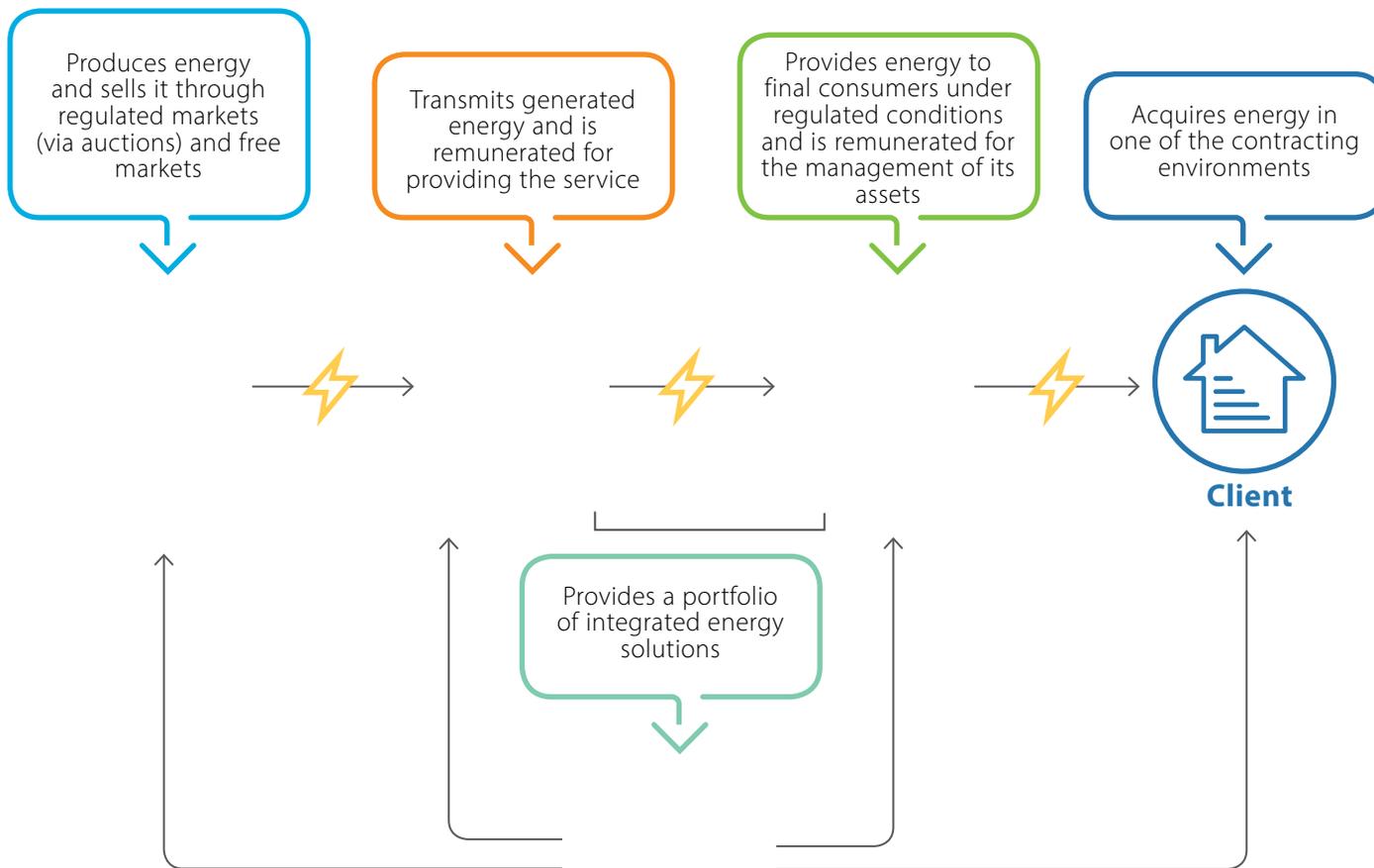
# More than a century of history

Our history is marked by cycles of growth and transformation.



# OUR BRANDS

Click on the electrical sector chain icons and learn more about our brands.



# INTANGIBLE ASSETS



## Sustainable brand

Sustainability is part of our strategy and is embedded in decision-making processes. Our systemic vision is consolidated in the Sustainability Platform, which establishes indicators and strategic goals aligned with the Sustainable Development Goals (SDG) and with megatrends in the power sector.



## Safety

The safety of our employees, contractors and the population is an absolute priority in our business model, a non-negotiable commitment and value. Our work is supported by technical and administrative processes that seek to mitigate risks and prevent the occurrence of accidents in maintenance activities, operation of the electric network, and traffic accidents, as well as in administrative environments. We have invested heavily in awareness-raising campaigns for communities in the entire concession area, addressing the risks of electricity and the preventive actions that should be taken to prevent accidents.



## Technology

During our century-long history we have always invested in and believe that technology is a key factor for business sustainability and the development of society. In line with this way of looking at our activities, we have tested storage batteries, sensors, hybrid power generation technologies and other solutions that will be driven by the growing demand for alternative energy sources. In 2018, projects such as the installation of automatic reclosers in the distribution network and the introduction of smart meters at the Jaguariúna Project are some examples of the importance of this topic at the company.



## Innovation

New businesses are gaining more prominence within the company. In 2018 we evolved the concept of open innovation with CPFL Inova, and we approached 12 scale-ups to advance on topics of interest, such as distributed generation, big data, analytics, artificial intelligence, internet of things, intelligent networks, and others. Also worth mentioning for the period were the Telhados Solares (Solar Roofs) project, which studied the possible impacts of the massive entry of photovoltaic solar generation onto the distribution network, in a real laboratory with 231 installed systems, and the completion of the Emotive project, one of the most complete assessments of the impact of electric mobility in Brazil.



## Digitalization

We want to expand the digitalization of our business over the next five years. To do this, we are working on solutions that improve the customer experience and generate more efficiency. Digitalization and automation also facilitate and optimize the performance of technical teams by sending real-time service demands via applications, already organized by priority and necessity.



## Knowledge

The CPFL Institute is the platform responsible for the strategy and management of social investment at the CPFL Group, and works to generate and share knowledge, encouraging social proactivity, and the sustainable development of communities.

# AWARDS AND CERTIFICATIONS

The awards received by CPFL Energia's business units and the certification of its operations attest to the quality of services provided and the pursuit of operational excellence. In 2018, we were recognized by several different entities.



## IASC 2018 Award (ANEEL)

Santa Cruz obtained the best rating among distribution companies in the South and Southeast regions, in the medium-sized companies category.

## Outstanding Company 2018

CPFL Energia achieved the best performance in branding, investment, and value for the Electric Energy category in the award given by *Consumidor Moderno* magazine.

## Latin American Telecom Awards - ALTA 2018

We were recognized in the Engineering category as the best company in excellence and solutions in services. The prize is organized by UTC Latin America (UTCAL).

## Project and PMO of the Year Award

We won in the Innovative Project of the Year category and were also finalists in the PMO category of the award developed by *Project Design Management* magazine.



## ANEEL Ombudsman Award

CPFL Paulista stood out in the prize category that evaluates the treatment of customer complaints and the Ombudsman structure made available.

## International Award of Legal Departments

We achieved the position of best legal department in Latin America at the award ceremony organized by the Leaders League.

## Abradee 2018 Award

- **CPFL Santa Cruz:** winner in the Socio-Environmental Responsibility category - concessionaires with up to 500,000 clients.
- **RGE Sul:** winner in the Customer Rating category - concessionaires with more than 500,000 consumers.
- **RGE:** winner in the Southern Region category - concessionaires with more than 500,000 consumers.



## SDGs IN BRAZIL the Role of the Private Sector



### SDG in Brazil - The Role of the Private Sector

The Arborização + Segura ("Safer Tree Planting") project was recognized by the United Nations (UN) as a success case thanks to its contribution to the Sustainable Development Goals (SDG) and was chosen to be presented at the event, SDG in Brazil - the role of the private sector, in New York.

### CIER Quality Award 2018

CPFL Paulista was renowned the best distribution company in Latin America and the Caribbean, in the category with more than 500,000 clients.

### ODS Brazil Award

The "Emotive" project received an honorable mention in the SDG Brazil Award, an initiative promoted by the Federal Government that recognizes the best projects adhering to the SDG.

### Inbrasc 2018 Award

The Brazilian Supply Chain Institute recognized CPFL Energia as a leader in the Supply Chain, Logistics and Purchasing markets.



### Eco Brasil Award

We won three trophies at the Eco Brasil Award, which recognizes companies that adopt the best practices for sustainable business development in the country. The cases awarded were Arborização + Segura, CPFL in Schools, and the Living Lab projects.

## Certifications<sup>1</sup>

CPFL Energia has ISO 27001: 2013 certification, which attests to the quality of the information-security management system implemented at the company's Data Center, including control, operation and maintenance services. Our distribution companies are also certified under the Quality Management System (ISO 9001), which is mandatory following ANEEL Normative Resolution 414/2010 and Prodist 8; the Environmental Management System (ISO 14001); and the Occupational Health and Safety Management System (OHSAS 18001).

	ISO 9001:2015	ISO 14001:2015	OHSAS 18001:2007
CPFL Paulista	✓	✓	✓
CPFL Piratininga	✓	✓	✓
CPFL Santa Cruz	✓		
RGE	✓	✓	✓

<sup>1</sup>We list the certifications of the enterprises in which we have 100% participation and operational control. The generation assets have their own certifications.



# HOW AND WHERE WE OPERATE

03.

*Aerial view of  
São Leopoldo (RS)*

# HOW AND WHERE WE OPERATE

The Brazilian power sector has a regulatory framework that enabled the attraction of investments and the universalization of service to the population. However, with new demands from society, there is a need to modernize the current model, which has been widely discussed by various members of civil society. As one of the main power companies in Brazil, active in all links of the sector's value chain, we contributed to this evolution by attending consultations and public hearings together with the main industry associations, the Ministry of Mines and Energy (MME), the Brazilian Electricity Regulatory Agency (ANEEL) and other governmental and regulatory bodies, in order to

provide society with a safer, more modern and more balanced power system.

In the management of our business we place customers at the center of strategic decisions and seek to prepare the company for the new scenario in the power sector. The standardization of processes, the monitoring of efficiency and quality indicators, the search for operational and cost efficiency, investments in new technologies such as the digitization and modernization of services, and customer satisfaction all lead to the sustainable growth of our operations and the generation of value for all stakeholders.



At CPFL, we believe that a **new model for the power sector** includes three fundamental premises:

The empowerment of the customer in a balanced way, reinforcing the power of choice, and ensuring that individual decisions do not generate distortions for the other agents in the power sector

The digitalization and modernization of operations and services

The establishment of a strategy for the country's electric power matrix - considering aspects such as security of supply, sustainability, and affordability - through a transparent and widely discussed process with society



# TRENDS IN THE POWER SECTOR

• Energy matrix decarbonization • Changing customer profiles and habits • New technologies and digitalization • Regulatory framework modernization



## Strategic priorities



### Current business optimization

- Innovate and use new technologies to increase operational efficiency, digitize and customize customer service and relationships
- Improve and automate internal processes, ensuring standardization and efficiency in business management



### Business portfolio optimization

- Enable growth in the sector's traditional businesses
- Develop new services and business models in line with market demands



### Skills for the future

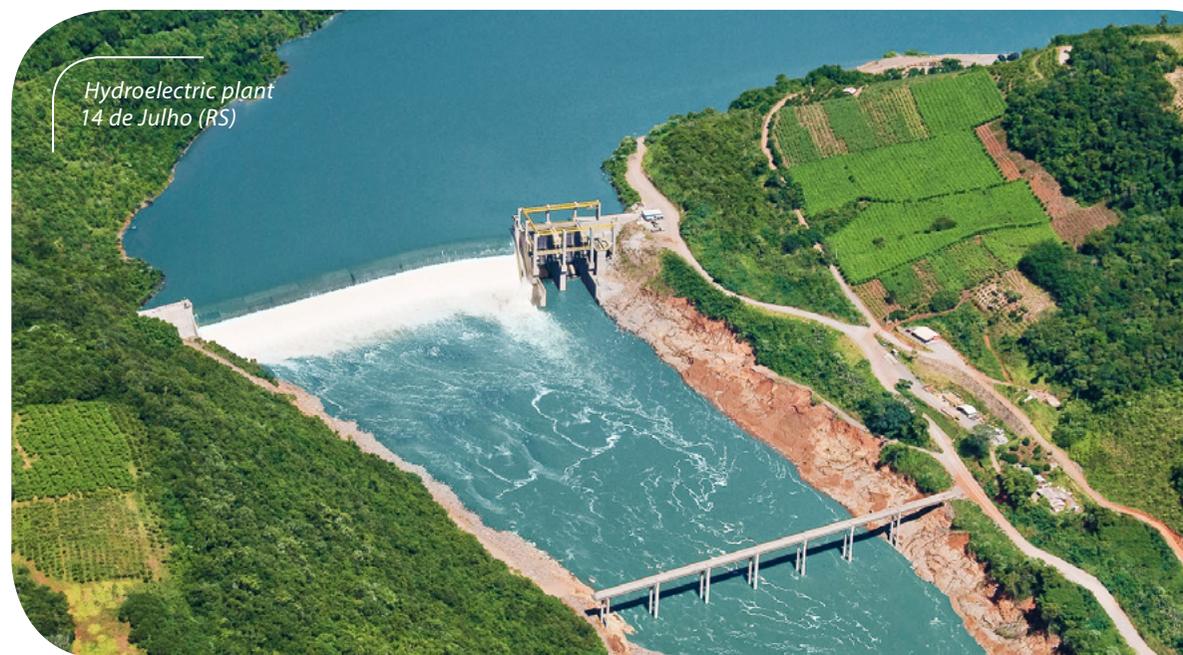
- Develop internal skills and empower people to face the new market reality
- Accelerate the process of innovation and development of new technologies
- Contribute to regulatory consultations and decisions, seeking business sustainability and the implementation of more efficient solutions for the market
- Incorporate sustainability, in all its dimensions, into strategy and decision-making

# GENERATION

With 3,272 megawatts (MW) of installed capacity, we are the third-largest private power generator in Brazil and the leader in renewable generation, operating hydroelectric, solar, wind and biomass sources. Our assets are located in four regions of Brazil: Midwest, Northeast, Southeast, and South. In 2018, we generated a total of 11 terawatt-hours (TWh) of energy, an increase of 26% from the previous year, and 95.6% of this came from clean sources.

The higher water levels at Brazilian rivers during the year led the National Electricity System Operator (ONS) to demand a larger volume of energy from hydroelectric plants. These same factors, coupled with the growth in the share of wind and solar sources in the Brazilian energy matrix, reduced the demand for thermoelectric plants to be fired up and, consequently, for the non-renewable energy generation of our projects.

In 2018, CPFL Geração achieved record availability at its plants, thanks to the optimization of operation and maintenance processes, training of the teams, and the application of new monitoring, diagnosis, and preventive maintenance technologies. On average, the portfolio reached availability of 91%, with the highlight being thermoelectric and hydroelectric plants, which registered a rate of 97%.



Hydroelectric plant  
14 de Julho (RS)

## NET PRODUCTION OF POWER BY SOURCE (GWH)<sup>1</sup>

	2016	2017	2018
HPP (Hydroelectric Power Plant)	8,368.1	4,499.7	6,959.3
Small Hydroelectric Power Plant (SHPP) and HGP (Hydroelectric Generating Plants)	874.1	712.3	789.3
Solar	0.8	0.8	0.8
Wind	2,019.6	2,304.6	2,165.5
Thermal	508.1	661.0	480.8
Biomass	546.7	532.6	561.9
<b>Total</b>	<b>12,317.4</b>	<b>8,710.9</b>	<b>10,957.5</b>

<sup>1</sup> Considering the net production of CPFL Geração and CPFL Renováveis projects in proportion to the stake held by CPFL Energia. Historical data restated.

## NET PRODUCTION OF POWER BY SOURCE (GWH)<sup>1</sup>



- 63.5%** Hydroelectric
- 19.8%** Wind
- 7.2%** SHPP (Small Hydroelectric Power Plant) and HGP (Hydroelectric Generating Plants)
- 5.1%** Biomass
- 4.4%** Thermal

<sup>1</sup> Considering the net production of CPFL Geração and CPFL Renováveis projects in proportion to the stake held by CPFL Energia. Solar sources represent less than 1% of the total generated.



SDG

## Sharing best practices

As part of our commitment to the continuous improvement of management, last year we organized the 2nd Seminar on Operation and Maintenance Practices, an event that shares experiences and cases that enabled operational, technical and economic gains. We had 71 participants, including employees and market professionals.

## Growing the portfolio

Our strategy seeks to expand the portfolio of energy generation from renewable sources. CPFL Renováveis is the business unit that focuses on capturing new opportunities through investment in new projects and acquisitions. Currently, the company has 94 assets in operation and has 446 employees carrying out its activities. In 2018, CPFL Renováveis acquired the Cherobim SHPP and the Gameleira Wind Farm Complex at the 28th New Energy Auction/A-6. The projects total 97.3 MW of installed capacity and are expected to start operating in 2024. One of the unique

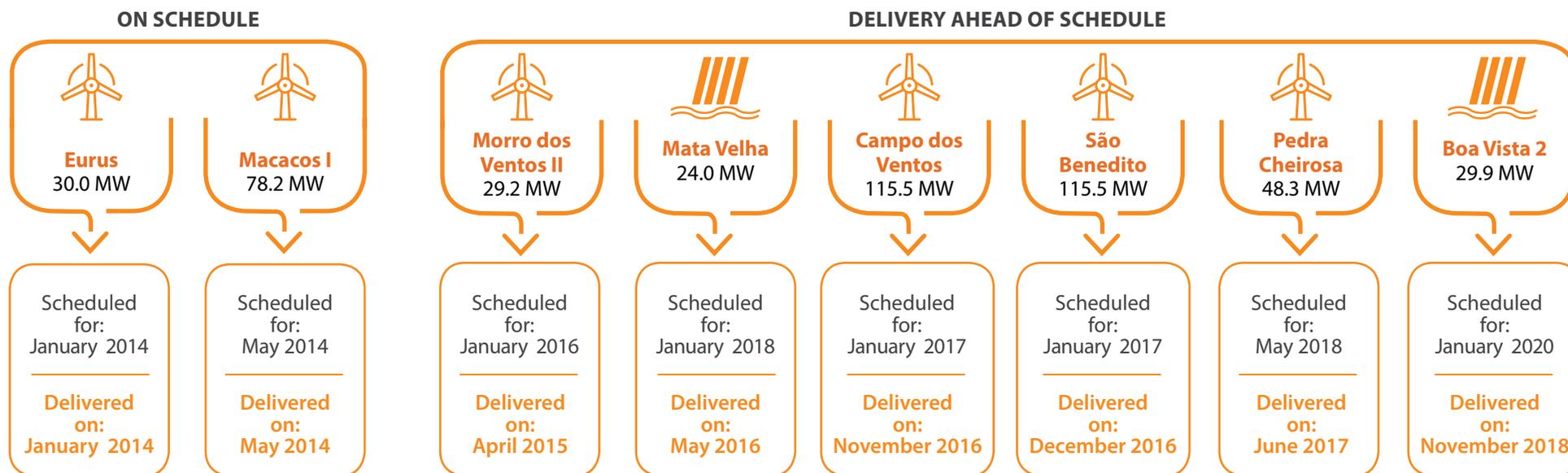
features of CPFL Renováveis is the acceleration capacity of the projects. This expertise has enabled the anticipated start-up of the assets. One highlight in 2018 was the delivery of the Boa Vista 2 SHPP 14 months ahead of schedule.

The new plant has 29.9 MW of installed capacity, and the energy generated is being traded in the open market prior to the energy sales contract going into effect in January 2020. With this, we achieved an additional return on the project, increasing the generation of value in our business model.

## Completion of Mandatory Tender Offer for CPFL Renováveis shares

State Grid Brazil Participações, the indirect controlling shareholder of CPFL Renováveis, acquired shares equivalent to 48.39% of the company's capital in November 2018, after the conclusion of the Mandatory Tender Offer. The operation totaled R\$ 4.1 billion. Thus, State Grid and CPFL Geração, indirectly controlled by the Chinese company, jointly hold 99.94% of CPFL Renováveis' share capital.

## CPFL Renováveis project delivery history



Tanquinho Photovoltaic Solar Plant



Our portfolio also includes the **Tanquinho Photovoltaic Solar Plant**, with installed capacity of 1.1 MWp.

INSTALLED CAPACITY COMPOSITION<sup>1</sup>



- 60.4%** Hydroelectric
- 20.5%** Wind
- 7.8%** SHPP (Small Hydroelectric Power Plant) and HGP (Hydroelectric Generating Plants)
- 5.8%** Biomass
- 5.5%** Thermal

<sup>1</sup> Considering the installed capacity of CPFL Geração and CPFL Renováveis projects in proportion to the stake held by CPFL Energia. Solar sources represent less than 1% of total capacity.

	TOTAL INSTALLED CAPACITY BY SOURCE (MW) <sup>1</sup>		
	2016	2017	2018
HPP (Hydroelectric Power Plant)	1,991.0	1,991.0	1,991.0
Small Hydroelectric Power Plant (SHPP) and HGP (Hydroelectric Generating Plants)	242.4	242.4	257.9
Solar	0.6	0.6	0.6
Wind	649.7	674.6	674.6
Thermal	182.3	182.3	182.3
Biomass	190.8	190.8	190.8
<b>Total</b>	<b>3,256.8</b>	<b>3,281.7</b>	<b>3,297.1</b>

<sup>1</sup> Considering the installed capacity of CPFL Geração and CPFL Renováveis projects in proportion to the stake held by CPFL Energia. Historical data restated.

# Map of business

## DISTRIBUTION

-  cpfl paulista
-  cpfl piratininga
-  cpfl santa cruz
-  RGE

## SERVICES

-  cpfl soluções
- 20 Operational Basis (SP)
- 1 Refurbisher (SP)
- 5 Market Business Offices (SP, AM, PE, RS, PR)

-  ENVO
-  cpfl total
-  cpfl atende
-  N&CT  
SERVIÇOS COMPARTILHADOS

## TRANSMISSION

-  7 Substations  
2 (SP), 1 (CE), 1 (SC), 3 (RS)
-  5 Transmission lines  
2 (SC), 4 (RS)

## GENERATION<sup>1</sup>

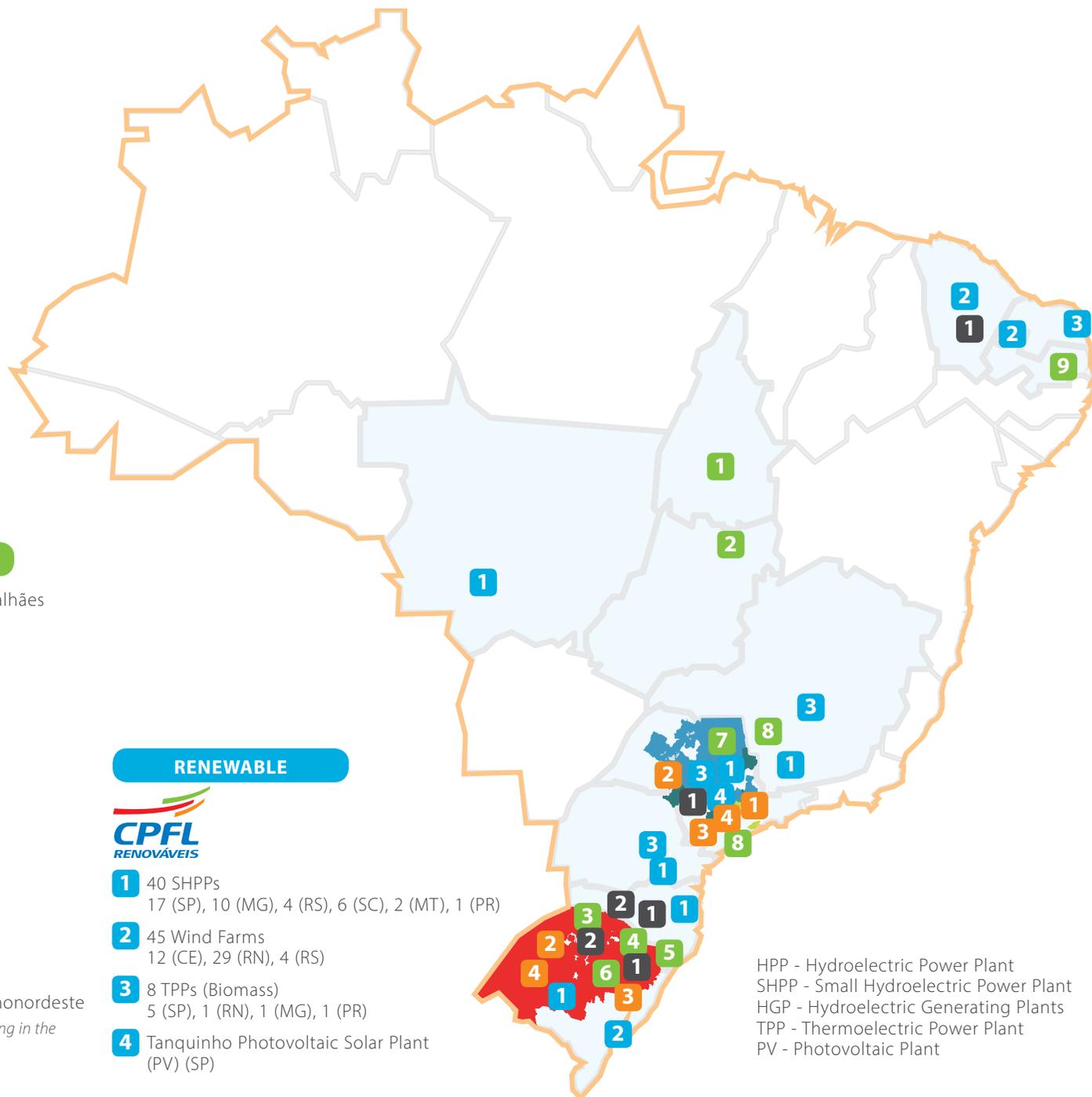
-  1 HPP Luis Eduardo Magalhães
-  2 HPP Serra da Mesa
-  3 HPP Foz do Chapecó
-  4 HPP Campos Novos
-  5 HPP Barra Grande
-  6 Ceran Complex
  - HPP Monte Claro
  - HPP Castro Alves
  - HPP 14 de Julho
-  7 2 SHPPs (SP)
-  8 6 HGP's  
4 (SP), 2 (MG)
-  9 TPPs  
Termoparaíba and Termonordeste

<sup>1</sup> See the CPFL Geração shareholding in the assets on page 34.

## RENEWABLE



-  40 SHPPs  
17 (SP), 10 (MG), 4 (RS), 6 (SC), 2 (MT), 1 (PR)
-  45 Wind Farms  
12 (CE), 29 (RN), 4 (RS)
-  8 TPPs (Biomass)  
5 (SP), 1 (RN), 1 (MG), 1 (PR)
-  4 Tanquinho Photovoltaic Solar Plant (PV) (SP)



HPP - Hydroelectric Power Plant  
 SHPP - Small Hydroelectric Power Plant  
 HGP - Hydroelectric Generating Plants  
 TPP - Thermoelectric Power Plant  
 PV - Photovoltaic Plant

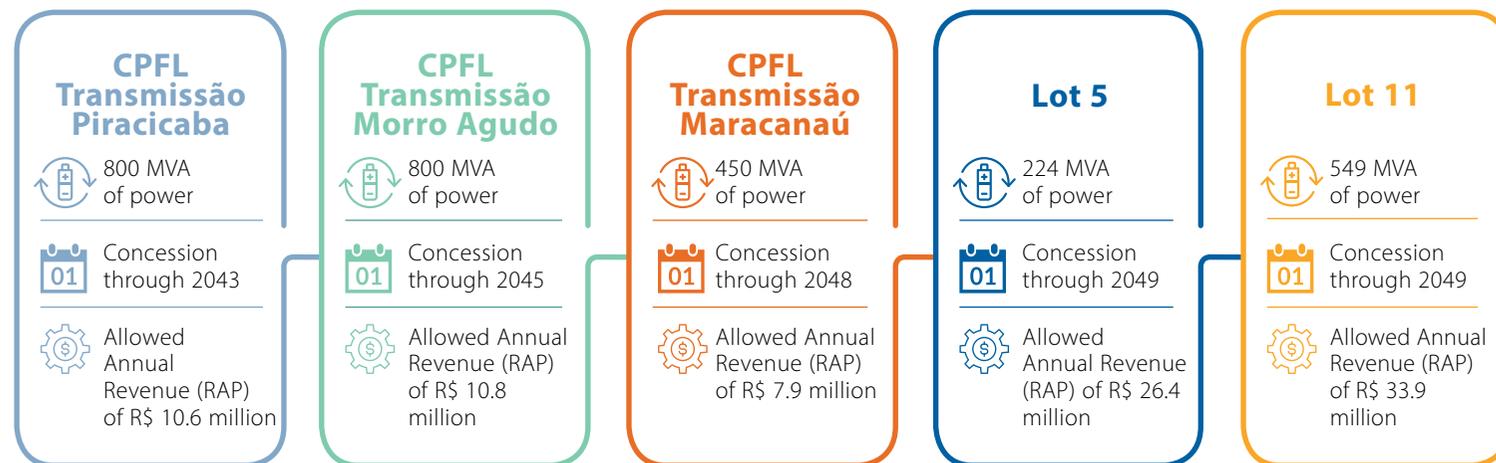
# TRANSMISSION

The transmission segment connects generators and large energy-consuming centers. Our work on this front seeks to diversify the company's portfolio along niche businesses, assets that have operational synergies with our distribution companies and generation projects.

In 2018, we expanded our presence in the transmission segment with the acquisition of three new ventures. In the auctions organized by ANEEL, we successfully bid for the project to build the Maracanaú II (Ceará state) substation, and in December we acquired Lots 5 and 11, which include new substations and lines in the states of Santa Catarina and Rio Grande do Sul.

The investments in Lot 5 involve improvements in the Itá substation and 320 kilometers of new transmission lines. The project in Lot 11 provides the construction of two new substations and 85 kilometers of lines.

In addition to these assets, we already operate in the segment through CPFL Transmissão Piracicaba and CPFL Transmissão Morro Agudo. The two companies operate in the countryside of São Paulo state.



**R\$ 817 million** will be invested by CPFL Energia in transmission projects acquired in **2018**

**More than 1,900 direct jobs** will be generated by the new projects

# DISTRIBUTION

With 14% of the national market, we are the second-largest company in the country in the energy distribution segment. Our companies operate in the states of São Paulo, Rio Grande do Sul, Minas Gerais and Paraná, serving approximately 9.6 million customers in 687 municipalities. Our management model, with a transversal engagement of the technical and administrative areas, strengthens the exchange of best practices and the standardization of procedures among the distribution companies. This is one of the factors that contribute to the continuous evolution of quality indicators.

In 2018, we distributed a total of 67.2 TWh of power in our concession area, an increase of 2.5% from the previous year. The number of customers served increased by 2.2% during the same period.

The distribution companies have a specific infrastructure that connects their networks to the energy transmission companies. In 2018, these assets included 12,600 kilometers of transmission lines and 548 substations.

At the end of 2018, the network serving concessionaires' customers totaled almost 324,000 kilometers, enough to circle the planet 25 times. Among the automation equipment included in this structure, it is worth highlighting the 9,800 reclosers installed so far in our concession area.

## CUSTOMERS SERVED BY CLASS

	2016	2017	2018
Residential	8,174,700	8,330,237	8,544,035
Industrial	61,112	59,825	58,241
Commercial	551,171	545,095	532,592
Rural	355,586	359,106	361,908
Government	61,208	60,639	60,685
Public service	9,649	9,790	10,194
Public lighting	11,073	11,230	11,659
Own consumption	939	966	982
Other	0	164	191
<b>Total</b>	<b>9,225,438</b>	<b>9,377,052</b>	<b>9,580,487</b>

## ENERGY DELIVERED BY DISTRIBUTION COMPANIES (GWH)

	2016	2017	2018
CPFL Paulista	29,266.9	29,960.3	30,567.5
CPFL Piratininga	13,547.2	13,729.5	14,140.4
RGE	10,012.7	10,268.1	10,500.0
RGE Sul	8,784.2	8,844.2	9,129.0
CPFL Santa Cruz	2,709.2	2,769.0	2,876.0
<b>Total</b>	<b>64,320.2</b>	<b>65,571.1</b>	<b>67,212.9</b>

## EXTENSION OF DISTRIBUTION COMPANIES' TRANSMISSION LINES (KM)

	2018
Low and medium voltage (up to 69 kV)	1,415.7
High voltage (equal to or above 69 kV)	11,123.8
<b>Total</b>	<b>12,539.5</b>

## EXTENSION OF DISTRIBUTION NETWORK (KM)

	2018
Urban	129,178.6
Rural	193,654.9
Underground	1,145.6
<b>Total</b>	<b>323,979.1</b>

## Integration of operations

RGE and RGE Sul concessions' merger, authorized by ANEEL in 2018, was completed on December 31, 2018. This concluded the integration program at RGE Sul, acquired in 2016, which included the unification of the two distribution companies' Operations Centers. Thus, our operation in Rio Grande do Sul was consolidated under RGE, our largest company in this segment in terms of concession area. In January 2018, we had already incorporated another four concessionaires to CPFL Santa Cruz: CPFL Sul Paulista, CPFL Leste Paulista, CPFL Jaguari, and CPFL Mococa.

The integration of operations provides increased efficiency and synergies between businesses. As a result, we achieve better management over costs and investments made to improve the network.

In 2018, we distributed **67.2 TWh** of energy to the **9.6 million customers** in the **687 municipalities** of our concession area



## ADMS: a new paradigm in distribution

In 2018, we have started to implement a new solution for the operation of our distribution and transmission systems. The Advanced Distribution Management System (ADMS) will establish a new paradigm in how the Operation Centers optimize the continuity of our distribution companies' power supply.

ADMS will unify on a single platform the operating features that are currently managed on different systems, ensuring greater reliability and robustness of the entire solution. Employees will also have real time access to the advanced functions of optimization and reconfiguration of electrical assets, fault location, operation of remote-control devices, integrated self-healing etc. When taken together, these benefits carry over into the management of the power network and, with it, better performance of the power system.

In 2019, we will conclude the development of the system and its integration. Tests and final adjustments will be carried out in the first half of 2020. The first distribution company to operate with this new solution will be CPFL Piratininga, by July 2020, and the other concessionaires in the São Paulo state will have the system implemented by the end of that year. Following that, the system transition will be carried out in the Rio Grande do Sul state, and we expect to complete that by the end of 2022.

**R\$ 47 million will be invested** in the ADMS system implementation

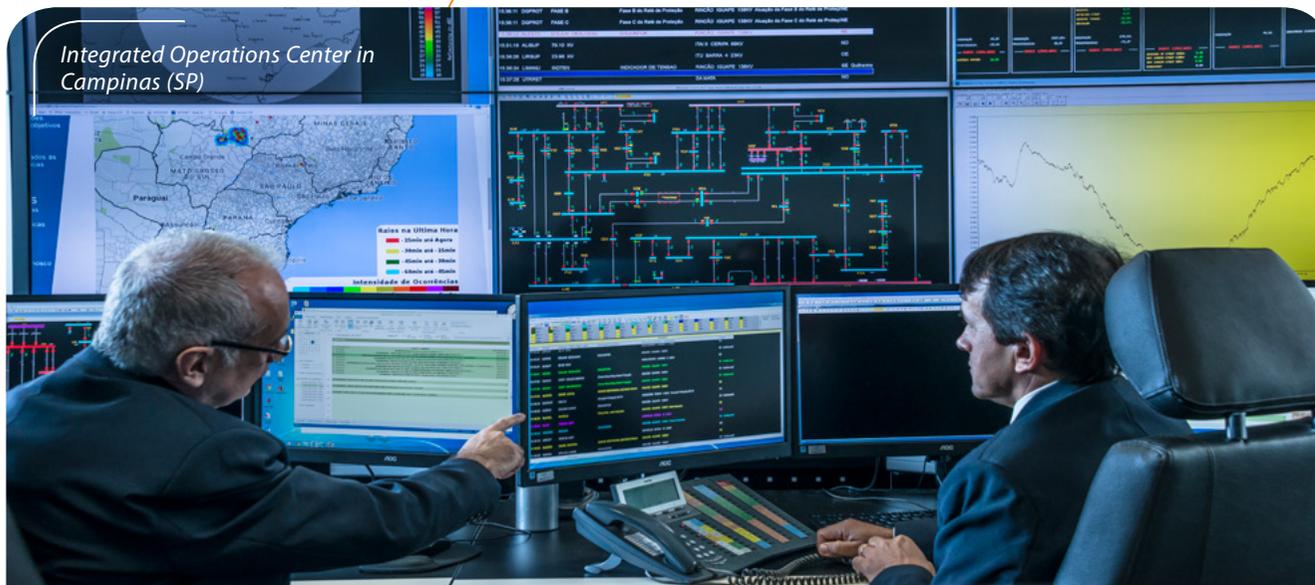


## Smart meter technology

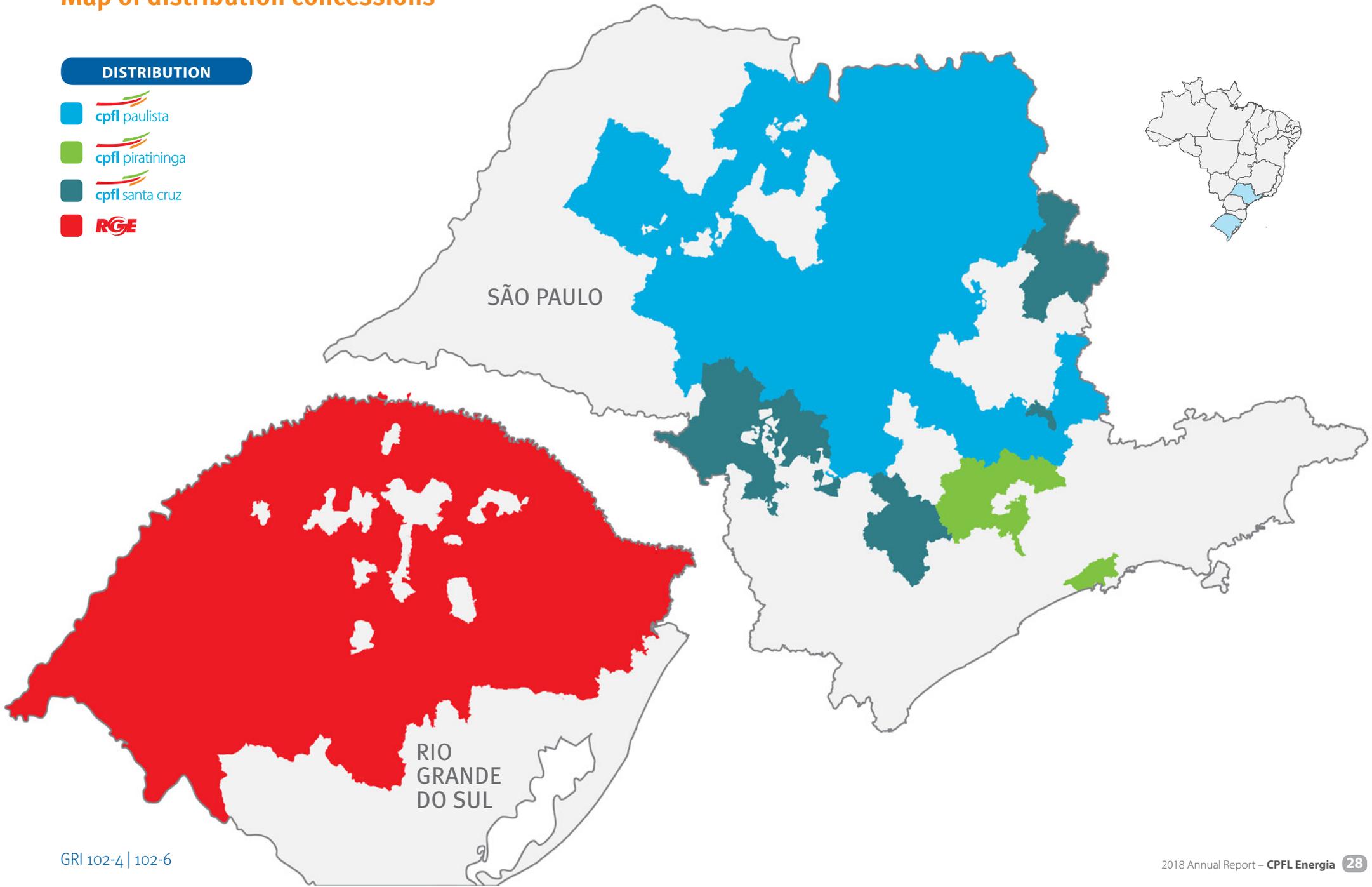
In 2019, we will begin a study to evaluate the best available telecommunication solution for the installation of smart meters for Group B customers (low-voltage customers, including residential, commercial and rural customers). With investments of R\$ 26 million, the initiative will replace 100% of the meters in the city of Jaguariúna (São Paulo state) with Smart Meters, with an evaluation of different communication technologies, such as radiofrequency, using the electrical grid, or via 4G. During 2018, we worked to evaluate and select suppliers of the equipment that will be installed. We chose four different technologies capable of providing remote communications between the meters and the Telecom Operations Center. The installation of the new meters should happen by 2020, and the technological assessments should be completed by 2021.

Based on the conclusions we obtain from this pilot project, we will develop an action plan to expand the technology of smart meters throughout our distribution companies' concession area. This initiative is aligned with the concept of smart distribution networks, also called smart grids, one of the trends in building more efficient and sustainable cities.

Another project contracted last year, with investments of around R\$ 32 million, seeks to complete the installation of smart meters for all Group A customers (large high-voltage customers), based on the MESH radio frequency technology. Currently, the CPFL Paulista, CPFL Piratininga, CPFL Santa Cruz and RGE networks already use this technology. The roll out of this solution for RGE Sul customers will occur until 2020, with the replacement of 6,600 meters.



## Map of distribution concessions





In line with the evolution of the energy sector and customer needs, in 2018 we launched CPFL Soluções, CPFL Energia's newest brand. With operations throughout the country, it has a portfolio of integrated solutions in energy management and trading, energy efficiency, distributed generation, energy infrastructure, and consulting services. Based on this strategy, we have unified the commercial teams and technical areas, previously divided under the brands CPFL Brasil, CPFL Eficiência and CPFL Serviços.

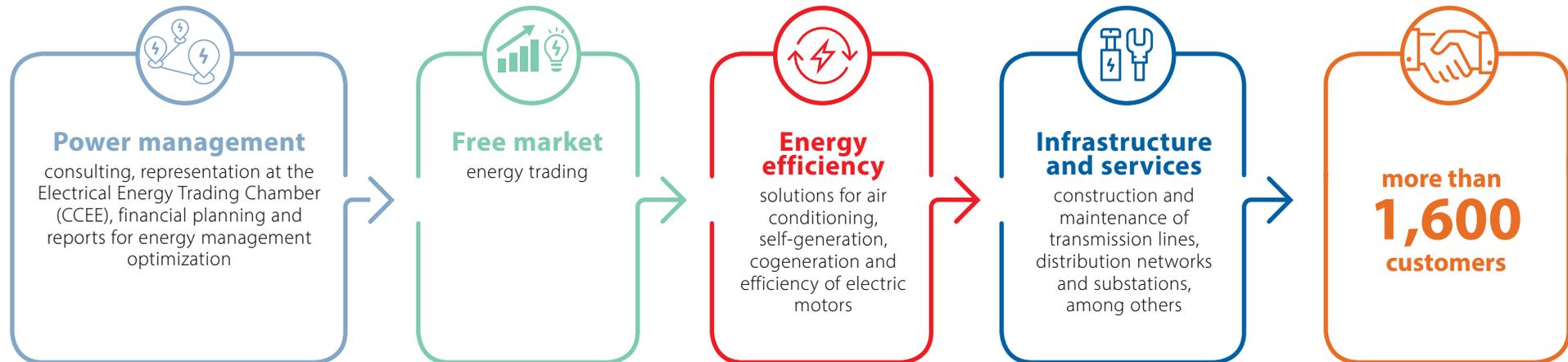
With CPFL Energia's financial strength and State Grid's technological know-how, CPFL Soluções was born with Ebitda of R\$ 94 million.

One of CPFL Soluções's highlighted projects provided greater autonomy and significant savings in electric energy through the integration of a solar system and a cogeneration system at the Supply Center of the State of Guanabara (Cadeq), in Rio de Janeiro. With the installation of more than 5,000 photovoltaic panels and six natural gas generators, the municipal market in Rio de Janeiro achieved monthly savings of R\$ 140,000 and became self-sufficient in energy. We are also responsible for all the equipment operation and maintenance for the next 15 years.



Photovoltaic panels in Cadeq (RJ)

## CPFL Soluções





Installation of solar roof in Campinas (SP)



## Envo: distributed generation for residential customers

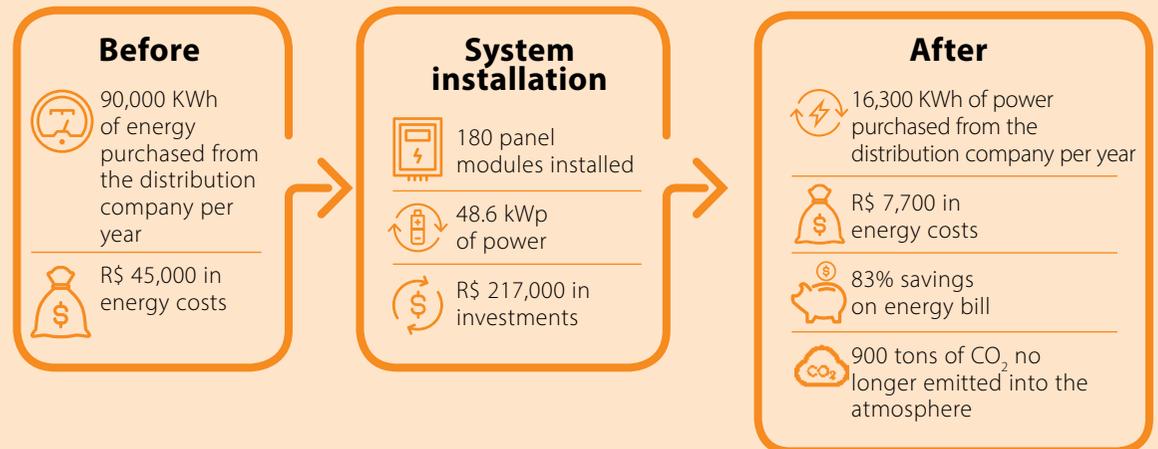
Envo, a company created in 2017, expands our portfolio of solutions and services for residential and small-business customers interested in investing in distributed solar generation. With this solution, it is possible to reduce energy bills by up to 95%.

Envo's business model involves technical design (evaluating items such as energy consumption, structural conditions of the property, levels of solar irradiation and shading on site), all the way down to reselling and installation of the solar panels and all the necessary

electrical structure. The access approval with the local distributor is also carried out by the company.

With this new brand, we have strengthened our position in developing businesses aligned with the generation of energy in renewable sources and contributing to a low-carbon economy. On Envo's website customers can access information about solar generation and can carry out simulations of their own project.

### Real case with one of our customers



## SHARED SERVICES

Our portfolio includes specialized companies that provide administrative and operational services to CPFL Energia subsidiaries or to other companies in the market. With this operating model, we ensure the standardization of processes, efficiency in cost management, and the generation of value through synergies and gains in scale.



Responsible for back-office activities, such as processing of administrative services. In 2018, Nect focused on raising the standard of service, adopting agile methodologies and restructuring processes to simplify the company and to increase competitiveness.

### Results:

- **More than 170,000** calls answered
- Revitalization of **220 facilities** of the Group

**AUTHI** Provides services related to information technology (IT) management. Thanks to its activities, we have increased the robotization and automation of internal processes, with gains in efficiency and scale.

### Results:

- **107,000** calls answered
- **200,000** hours in systems development



Provides contact center and customer relationship services. Serves the operations of our distribution companies.

### Results:

- **8.2 million** phone calls answered
- **38 million** minutes of call time



With expertise in offering financial products, CPFL Total facilitates the operation of partners that use energy bills as a means of payment for transactional operations.

Amid the main products offered by the company are the collection of service charges on energy bills, such as insurance installments, newspaper subscriptions, discount cards, health insurance plans, among others, and the sale of printed advertising space on the energy bill.

### Results:

- **42 affiliated companies**
- **R\$ 210 million** in financial volume captured/transferred



CPFL employees

# OUR CORPORATE GOVERNANCE

04.

CPFL employees





# OUR CORPORATE GOVERNANCE

We are a publicly traded company with shares listed on the Novo Mercado, a segment of B3 that brings together companies with the best corporate governance practices, and on the NYSE (ADR Level III). Our management model is based on the principles of transparency, fairness, accountability, and corporate responsibility.

State Grid Brazil Power Participações SA (SGBP) took control of CPFL Energia at the beginning of 2017. State Grid

holds 94.75% of our capital stock and has placed its technical capacity and its knowledge of the sector at the service of growing our businesses, with a long-term vision of strengthening value generation. In 2018, 30 CPFL Energia employees visited the parent company's facilities and learned about the practices adopted in China, as well as initiating technical exchanges between the teams.

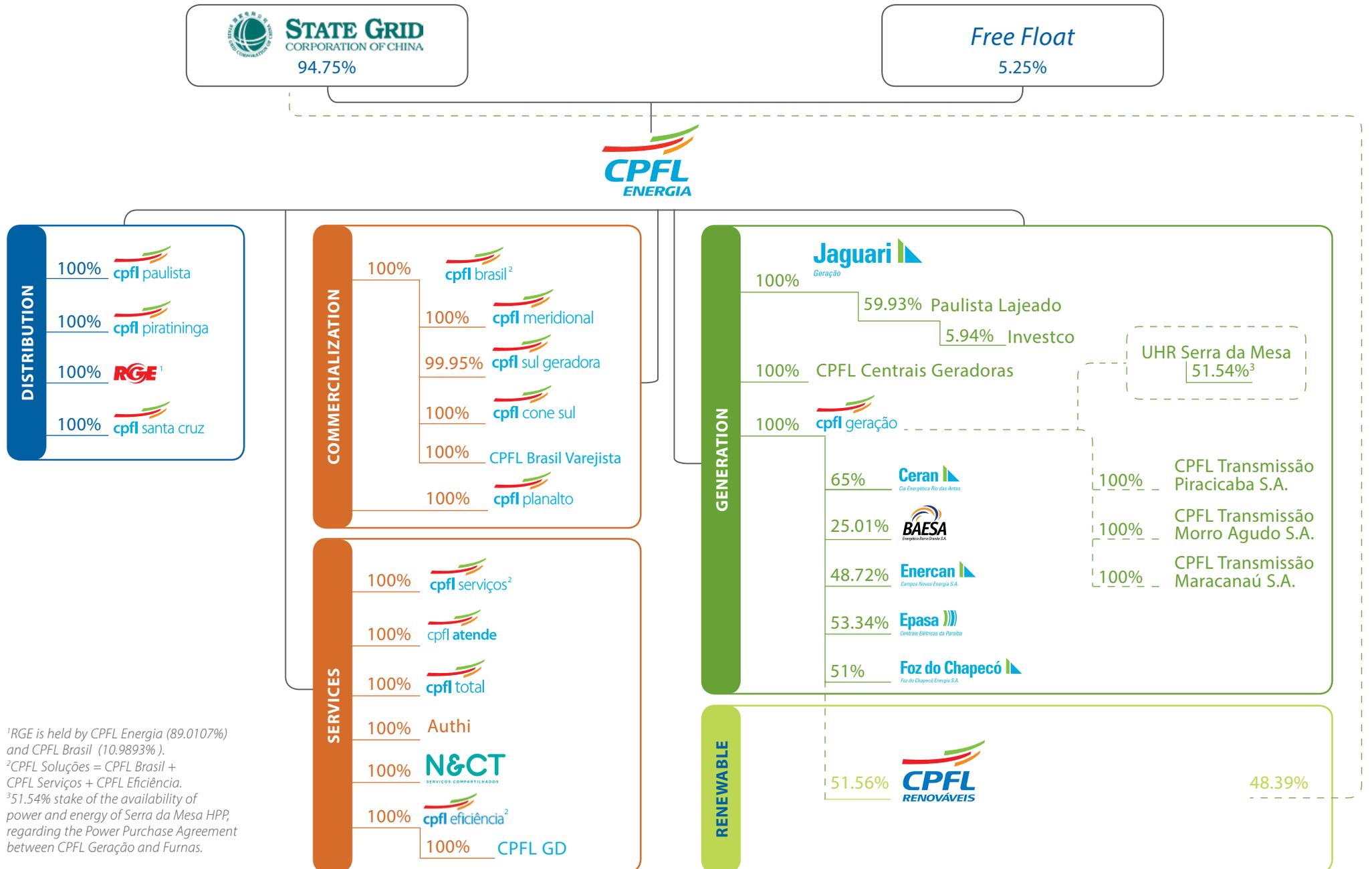


State Grid

## About State Grid

- **2<sup>nd</sup> place** in the Fortune Global 500 list of the largest corporations in the world (*Fortune* magazine)
- **Operations in several countries**, such as Australia, Philippines, Georgia, Greece, Hong Kong, Italy and Portugal
- Close to **US\$600 billion** in assets
- **1.7 million** employees
- Serves **88%** of China's population, equivalent to 1.1 billion people
- **Global leader** in distribution technology and a **world reference** in the transmission of energy over long distances
- Operating in Brazil since **2010** and currently present in **12 states**
- About **US\$11 billion invested** in the Brazilian power sector

# Corporate Structure



<sup>1</sup>RGE is held by CPFL Energia (89.0107%) and CPFL Brasil (10.9893%).

<sup>2</sup>CPFL Soluções = CPFL Brasil + CPFL Serviços + CPFL Eficiência.

<sup>3</sup>51.54% stake of the availability of power and energy of Serra da Mesa HPP, regarding the Power Purchase Agreement between CPFL Geração and Furnas.

## CPFL Energia

### ADR (CPL)

on New York Stock Exchange (NYSE): ADR Level III listing

### Voting share (CPFE3)

on São Paulo Stock Exchange (B3): listing in the Novo Mercado, as well as on the following indexes:

- ITAG – Special Tag-Along Stock Index
- IGC – Special Corporate Governance Stock Index
- IEE – Electric Utilities Index

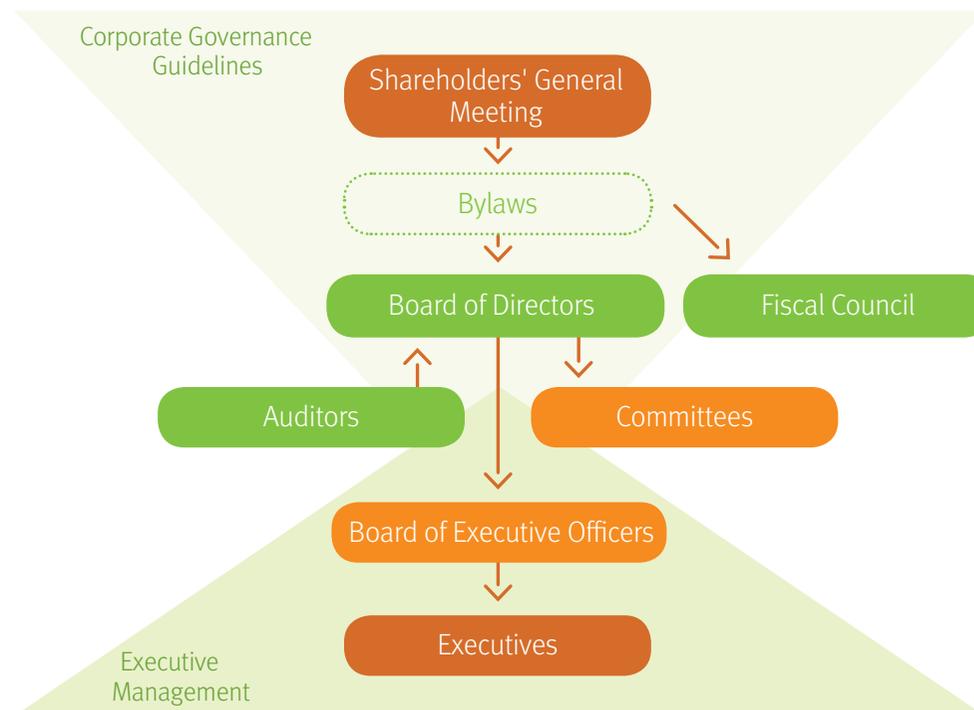
**Market Cap**  
of R\$ 29.4 billion<sup>1</sup>

<sup>1</sup> As of December 31, 2018

Our corporate governance structure includes the Board of Directors, which is responsible for establishing the general guidelines for the business, and the Executive Board, responsible for executing the strategy outlined by shareholders. We also have a Fiscal Council, a body that is independent of the Board of Directors and permanently established. Among its attributions are carrying out the activities of an Audit Committee. This configuration ensures alignment of our governance with the requirements of the Sarbanes-Oxley Act (SOX), applicable to foreign companies listed on the United States stock exchange, and with NYSE standards.

The Board of Directors is composed of four members representing the controlling shareholder, the Chief Executive Officer of CPFL Energia, and two other independent board members (elected pursuant to the B3 Novo Mercado Regulation). All members have a one-year term of office, with reelection being permitted. In addition to the Chief Executive Officer, Gustavo Estrella, the executive Yumeng Zhao is also a member of the Board of Directors. The appointment of members is defined at the General Shareholders Meeting, observing the requirements established by Law 6,404/76, Novo Mercado Regulations, and instructions from the Brazilian Securities and Exchange Commission (CVM). In addition, the appointment of board members takes into consideration the time availability of these professionals, since the body is very active, with ordinary monthly meetings and extraordinary meetings whenever necessary.

## Governance structure



### COMPOSITION OF THE BOARD OF DIRECTORS

Bo Wen <sup>1</sup>	Chairman
Shirong Lyu	Vice Chairman
Yang Qu	Advisor
Yumeng Zhao	Advisor
Gustavo Estrella <sup>2</sup>	Advisor (since 02/01/2019)
Antonio Kandir	Independent Member
Marcelo Amaral Moraes	Independent Member

<sup>1</sup>Doesn't hold executive functions in the company.

<sup>2</sup>Andre Dorf held the post until January 31, 2019. After his departure, Gustavo Estrella was elected as an Advisor of the company.

In order to support the decision-making process and the evaluation of risks and opportunities that impact company business, the Board of Directors is supported by three advisory committees – the Management Processes, Risk, and Sustainability Committee, the Human Resources Management Committee, and the Related Parties Committee - and two commissions – the Corporate Budget and Finance Commission and the Strategy Commission.

The establishment of the Committees is determined by the Bylaws and they are permanently installed. The Commissions are constituted annually, and their topics and competencies are determined by the Board of Directors. Each of these forums is composed of three full members and three alternates with a one-year term, and appointed by the Chairman of the Board (see more in the table).

The continuous training of members of the Board of Directors occurs through two main mechanisms. In the context of the CPFL University, training sessions are carried out every two years on topics such as "the role and responsibilities of advisors" and "Fundamental aspects for decision-making." In 2018, training at this event totaled 596 hours for the 35 participating leaders. The second leverage for skills development for these stakeholders is the annual strategic planning process, which includes presentations from experts on critical issues and trends. In the last year, three lectures were held, which discussed economic and competitive scenarios and the power market.

CPFL Energia complies with the provisions of Law 6,404/76 and the Brazilian Securities Commission (CVM) on conflicts of interest and transactions with related parties, and their disclosure. In addition, in the Internal Regulations of the Board of Directors and in the Code of Ethical Conduct it establishes the principles regarding conflicts of interest or issues of private interest to be followed by the company's board members, officers and employees.

## COMPOSITION OF BOARD OF EXECUTIVE OFFICERS

Gustavo Estrella <sup>1</sup>	Chief Executive Officer
Yumeng Zhao	Deputy Chief Executive Officer
Yuehui Pan <sup>2</sup>	Chief Financial and Investor Relations Officer
Yuehui Pan (Interim)	Deputy Chief Financial Officer
Luís Henrique Ferreira Pinto	Chief Regulated Operations Officer
Karin Regina Luchesi	Chief Market Operations Officer
Gustavo Pinto Gachineiro	Chief Legal and Institutional Relations Officer
Wagner Luiz Schneider de Freitas	Chief Business Management Officer
Gustavo Estrella (Interim)	Chief Planning and Business Development Officer

<sup>1</sup>Andre Dorf was CEO of CPFL Energia until January 31, 2019. Gustavo Estrella, who held the position of Chief Financial and Investor Relations Officer, was promoted to the new position.

<sup>2</sup>Gustavo Estrella was Chief Financial and Investor Relations Officer until January 31, 2019. Yuehui Pan was promoted to the new position.

## Main attributions of committees and advisory commissions to the Board of Directors

### Management Processes, Risks and Sustainability Committee

Supervises the work of internal audits, risk management, compliance, and sustainability management.

### Human Resources Management Committee

Coordinates the selection process for the Chief Executive Officer of CPFL Energia and guides the definition of criteria for overall compensation and succession plan of board members.

### Related Parties Committee

Evaluates the procedures for selecting suppliers and service providers, the processes

for closing out energy purchase and sale contracts, and the monitoring of any transactions with related parties.

### Corporate Budget and Finance Commission

Interacts with the Executive Board to evaluate the company's budget, taking into account assumptions regarding the market in which the company operates, investment forecasts, and CPFL Energia's guarantees.

### Strategy Commission

Discusses updates to the strategic plan, acquisitions of assets, investments in business and the strategy of commercialization of electric energy.

# STRATEGIC PLANNING

Our company's Strategic Plan is updated annually, contemplating a five-year horizon. This process includes structured mechanisms for evaluating external trends that may impact our business and identify the demands and expectations of our stakeholders. Analyses of external scenarios consider macroeconomic, energy market, competitiveness, and business environment aspects.

The assessments made for 2018 planning, for example, indicated a gradual economic recovery, the growth of renewable sources and distributed generation, and discussions about the regulatory framework of the sector. Based on these and other trends, our teams are able to assess the influence of these issues on our business and prioritize the development of projects and initiatives.

The identification of stakeholder needs and expectations is based on a variety of sources such as interviews with shareholders, external surveys - such as those by the Brazilian Electricity Regulatory Agency (ANEEL), the Brazilian Association of Electricity Distributors (Abradee) - and internal studies - such as those about the organizational climate and the perception of safety - from requirements established in the concession contracts, the Rede de Valor ("Value Network") Program, and

benchmarks set by other companies of similar size and position to ours. These inputs are organized in a matrix in relation to stakeholders and, in many cases, translated into goals for company executives.

The Board of Executive Officers is responsible for defining our strategic guidelines and for presenting them to the Board of Directors. The approval of the highest governance body is supported by the prior analysis by the Strategy Commission and, once the Plan has been validated, it is incumbent upon the Executive Board, together with all CPFL Energia areas, to implement these objectives into goals for the Officers, which are approved by the Board of Directors with support from the Human Resources Management Committee. After that, the goals of managers and directors are defined, and meetings are organized to share the established objectives, supporting the improvement of processes and results.

One of the main changes promoted in the 2018 Strategic Plan was the integration with the Sustainability Platform, a tool that establishes indicators and targets for protection, optimization and value creation in our business, considering economic, social and environmental impacts and risks (learn more on page 41).



Tanquinho substation in Campinas (SP)

## Engaging stakeholders in strategic planning

Stakeholders	Shareholders	Customers	Employees	Suppliers	Regulatory agencies	Society
<b>Main expectations identified</b>	Financial soundness, operational excellence, good reputation, adoption of best practices and synergies with State Grid	Reliability of supply, with few interruptions and quick restoration of the energy, and quality service	career plan and motivating work environment	Safe and reliable environment for business activities and relations	Availability, quality and continuity of energy supply	Safety of electrical network and plants, reduction of polluting emissions, and support for culture

# INTEGRATED RISK MANAGEMENT

CPFL Energia's Corporate Risk Map consolidates the main strategic risks to which the Group's companies are exposed, organized in the following categories: Financial, Operational, Legal, Energy Market, Sector Regulation, Environmental, and Reputation. These risks are regulated by the **Corporate Risk Management Policy** approved by the Board of Directors. The policy provides models, indicators and exposure limits, as well as detailing the treatment and reporting required in case of extrapolation of risk parameters.

The risk indicators and limits are continuously evaluated and, whenever necessary, proposed amendments should be submitted by CPFL Energia's Board of Executive Officers to CPFL Energia's Board of Directors for deliberation.

The roles and responsibilities of each instance of the risk management structure are set out in the same policy and include the following stakeholders: Board of Directors, Fiscal Council, Management Processes, Risks and Sustainability Committee, Board of Executive Officers, Internal Audit Management, Risk and Compliance, and business areas.



**For more information**

see the section 4 and 5 of CPFL Energia **Reference Form.**

## More synergy in risk management

CPFL Energia has restructured the area responsible for risk management, uniting under a single management group the company's risk management, compliance, internal control, anti-corruption and ethics teams, which reports to the Company's Chief Executive Officer. The purpose of this change was to foster synergies between these action fronts and strengthen their independence in relation to other corporate activities, contributing to the systemic view of the organization and the effectiveness of the practices employed in each of these areas.

One of the important advances that resulted from this new structure is the monthly provision of a consolidated report to executives of CPFL Energia with the main highlights of risk management, compliance, internal controls, anticorruption, ethics and internal audits. This practice allows executives to be constantly updated on these aspects and to make increasingly timely decisions to ensure the achievement of strategic objectives and the generation of value.

The Corporate Risk Map also began to include information about trends and concerns related to the risks mapped, classified along three horizons (short, medium and long term).



## Ethics and compliance

The **Code of Ethical Conduct** is the instrument that guides the actions of all employees and the development of the business, respecting the applicable internal rules and regulations. The Ethics Management and Development System (SGDE) is the mechanism we use to monitor the application of the Code of Ethical Conduct in our activities.

### The SGDE consists of:

- **Code of Ethical Conduct**

brings together our main ethical conduct guidelines in a document with simple structure and language, easy and accessible to all stakeholders.

- **Ethics Committee**

a multidisciplinary body with the objective of analyzing and dealing with queries, suggestions and accusations received by our External Ethics Channel. Currently, the Committee is composed of five members, three of whom are CPFL Energia Officers and two independent external members.

- **Internal Regime of the Ethics Committee**

document that establishes the working dynamics of the Committee, including flows, deadlines, deliberations, and processes, among other items.

- **External Ethics Channel**

is the mechanism for consultations, suggestions and complaints related to CPFL Energia's conduct guidelines and commitments. Managed by a specialized outside



CPFL employees in São Leopoldo (RS)

company, the channel is available in Portuguese and English and can be accessed 24 hours a day by all our stakeholders via phone, website or application for smartphones. Whistleblowers can file anonymous complaints, and the anonymity and confidentiality of the presented information is guaranteed.

- **Reports Processing Commission (CPD)**

supports the Ethics and Business Conduct Committee in the investigation of complaints received from employees and other stakeholders.

- **Training**

we provide training and the dissemination of content related to our ethical principles. In 2018, 73% of employees were trained in ethical and anti-corruption guidelines.

- **Dissemination**

we carried out constant campaigns with the objective of raising awareness among employees and other stakeholders regarding ethics and compliance issues.

### EMPLOYEES TRAINED IN ANTI-CORRUPTION DIRECTIVES

	2017		2018	
	Number trained	Percentage of total employees	Number trained	Percentage of total employees
<b>Southeast</b>				
Leadership <sup>1</sup>	440	69%	515	87%
Other employees	5,979	73%	6,501	75%
<b>Total</b>	<b>6,419</b>	<b>72%</b>	<b>7,016</b>	<b>76%</b>
<b>South</b>				
Leadership <sup>1</sup>	89	48%	146	86%
Other employees	1,488	39%	2,341	65%
<b>Total</b>	<b>1,577</b>	<b>39%</b>	<b>2,487</b>	<b>66%</b>
<b>Consolidated</b>				
Leadership <sup>1</sup>	529	64%	661	87%
Other employees	7,467	62%	8,842	72%
<b>Total</b>	<b>7,996</b>	<b>62%</b>	<b>9,503</b>	<b>73%</b>

<sup>1</sup> Includes principals, managers, coordinators, supervisors and leaders.

Our Integrity Program ensures adequate mechanisms to promote ethical conduct in line with our principles and guidelines. Through this program, 100% of operations are covered by periodic assessments to identify risks related to corruption. This evaluation occurs by means of the following tools:

**• Risk Assessment**

Annual process to capture the Board of Executive Officers' perception regarding the risks to which CPFL Energia is exposed.

**• Fraud Risk Analysis (FRA)**

Methodology applied on demand to evaluate a particular process or area, listing the possible associated fraud risks and proposing actions and controls for mitigation based on the provisions of Law 12,846/13.

**• Sensitive Stakeholder Assessment**

Processes evaluation regarding sensitivity to the corruption risks, in order to map out the need for training for employees.

**• Anti-Corruption Policy and Internal Regulations**

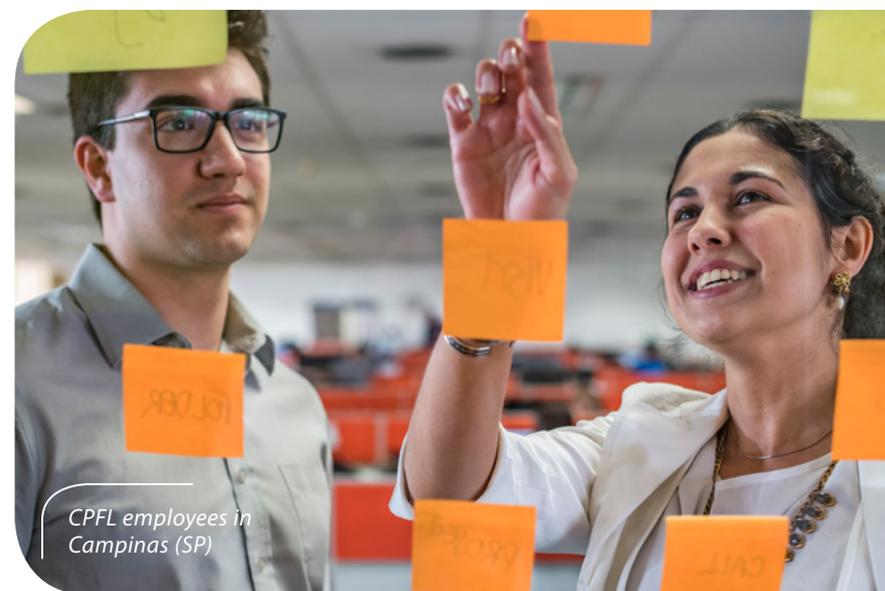
Set of internal policies and standards that establish the guidelines and conduct to be observed within operations from the perspective of the Integrity Program.

To publicize the Integrity Program guidelines and strengthen the ethical and legal compliance culture, we follow a structured communication plan on the subject, involving events, lectures and campaigns for our key stakeholders, including leaders, employees, and suppliers. The dissemination of these guidelines to suppliers occurs in contracts, through a specific anticorruption clause and the requirement that these partners adhere to the Code, as well as through

lectures and communications within the scope of Value Network, a relationship program that we conduct periodically with suppliers and business partners (read more on page 58).

The second front for promoting a corporate culture aligned with our guidelines of conduct are the training sessions for employees. All our professionals must carry out online training provided by CPFL University on the subject. For teams with the greatest exposure to integrity risks, we conduct face-to-face training.

Between 2017 and 2018, efforts were focused primarily on the training of employees of RGE Sul, a distribution company acquired by CPFL in 2016. As a result, the number and the percentage of employees trained in the South region practically doubled in the annual comparison.



CPFL employees in Campinas (SP)



SDG

**Scope of Integrity Program**

- Ethical Code of Conduct and Anti-Corruption Policy
- Annual communication and training campaigns
- Periodical analysis of risks related to the subject, through internal control processes
- Audit of financial statements by independent company
- Complaint channel for possible ethics violations

**Main actions in 2018**

**Integrity Week**

Annual event directed at all employees, in which we use internal and external channels to provide reflections on ethics, in addition to hosting a lecture given by a person qualified and recognized to deal with the subject.

**Pills of Integrity**

Texts and videos on the subject, periodically sent to all employees via email marketing.

**Event for senior management**

Annual event directed at leadership, with a presentation given by a person qualified and recognized to deal with the subject of integrity.

**Training for field teams**

Face-to-face training for electricians and support teams addressing integrity issues.

# SUSTAINABILITY MANAGEMENT

Sustainability management is integrated into our businesses and adds value to the company providing a long-term vision and identifying new products and opportunities for growth and continuity of operations.

This systemic vision is consolidated by the Sustainability Platform, created in 2014 and updated annually using a five-year horizon. In 2017, we designed a new management structure with the incorporation of Sustainable Development Goals (SDG) and power sector megatrends as drivers of the long-term vision, covering the period through 2022.

The Sustainability Platform presents a matrix that correlates key themes for sustainability management with stakeholder expectations. Thus, we identified 13 levers for sustainable value, which are divided into 58 indicators (economic, environmental and social) that protect, optimize and create value through short- and medium-term goals. Success in achieving established objectives for the indicators is reflected in the variable remuneration paid to company executives.

The indicators are periodically evaluated by the Institutional Relations and Sustainability Board. Changes in performance are monitored by the Sustainability Committee and communicated to the Board of Executive Officers; the Management Processes, Risks and Sustainability Committee; and to the Board of Directors. When there are deviations from these established goals, we draw up action plans to be executed by the administrative and operational areas.



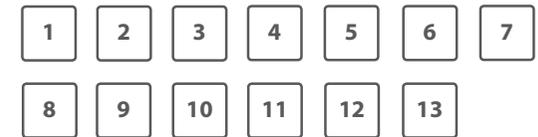
CPFL in  
São Leopoldo (RS)

# Sustainability Platform

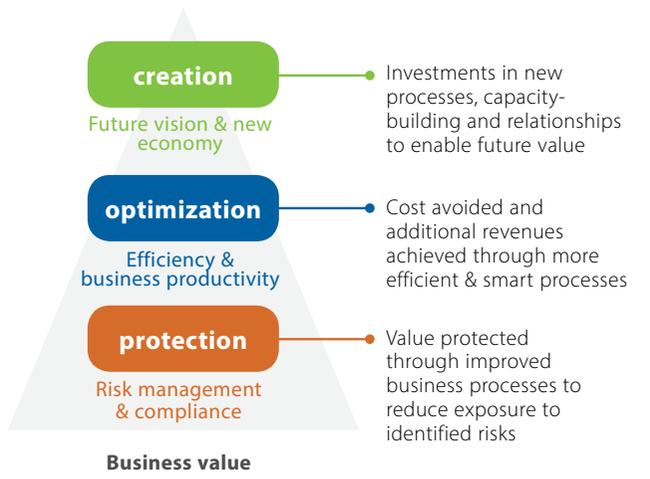
Through our Sustainability Platform, integrated with CPFL Energia's Strategic Plan, our shareholders can monitor environmental, social, and financial operation indicators and targets considered relevant to sustainable business management



## 13 BUSINESS SUSTAINABILITY LEVERS



For each one of the 13 business sustainability levers, there are indicators (58 in total) that measure the protection, optimization and value creation of the company



and set goals for the 5 year cycle to improve our performance in sustainability

# Targets and results

See some of the targets we have assumed in the **Sustainability Platform**

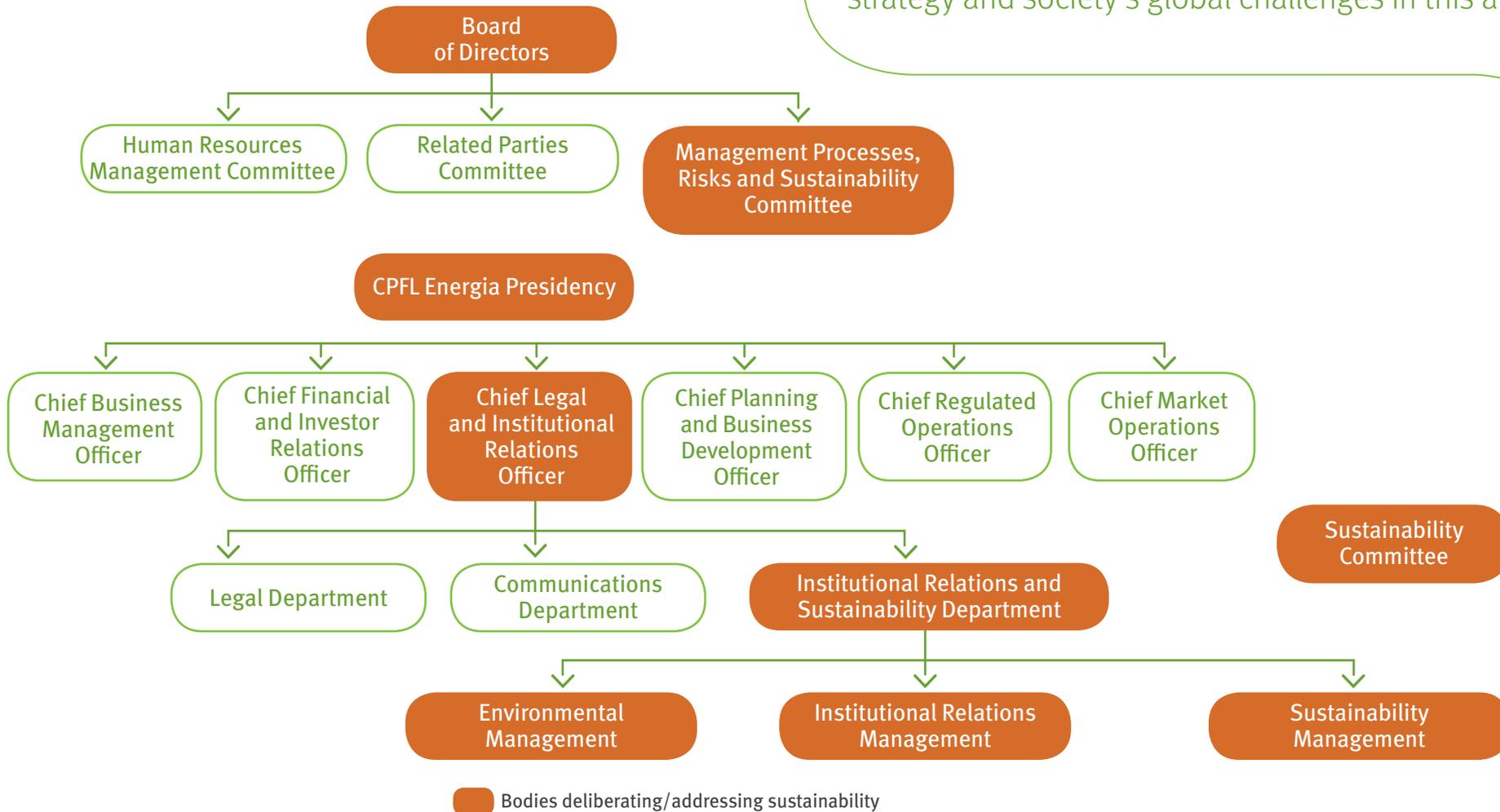


## Sustainability governance

Our corporate governance model has structures and mechanisms that strengthen sustainability management across all businesses. Our management follows guidelines established by the **Sustainability Policy**, in effect since 2015 and applicable to both CPFL Energia and to the units of the segments in which we operate.



The sustainability governance at CPFL Energia facilitates **the integration of our objectives** with the business strategy and society's global challenges in this area

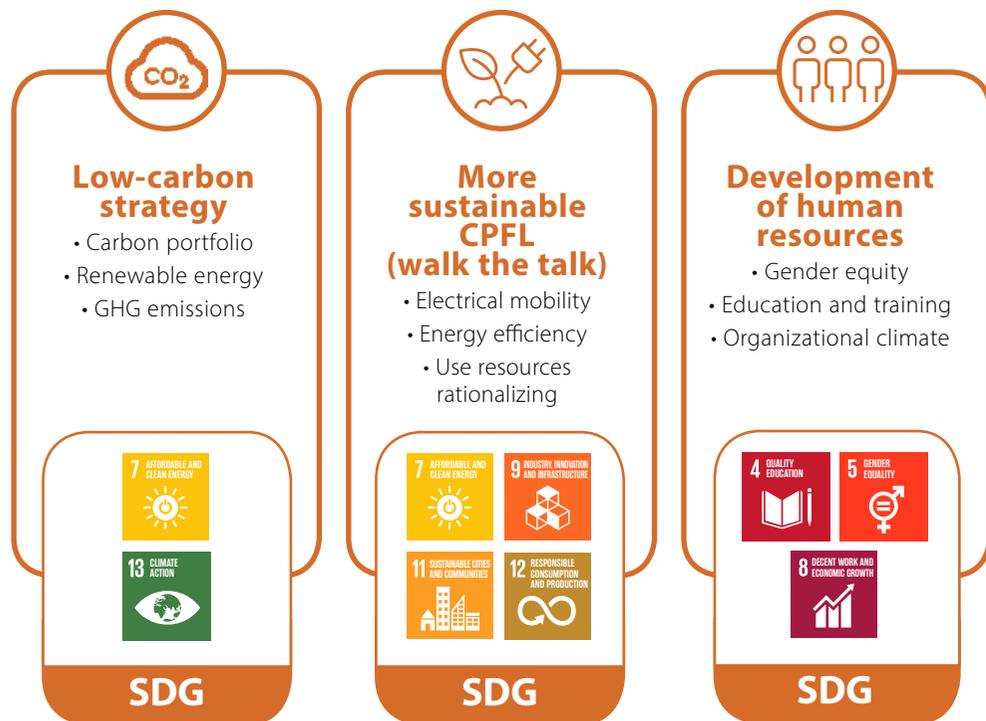


## Sustainability integrated into business model

As a way of promoting senior-management engagement with sustainability, in 2018 we began - via the Sustainability Committee – to develop working groups focused on topics relevant to our business model. Our goal is to align strategy with long-term goals that enhance our ability to protect, optimize and create value.

One of the main benefits of this model was the identification of the contributions that our initiatives can give to achieving SDG goals. The leaders involved in the project still face the challenge of validating the priority commitments and the long-term goals they will undertake, making the value generated for the company's business model more tangible.

### The action pillars on which the working groups focus:





# SHARED VALUE

05.

CPFL Soluções Trading Desk  
in Campinas (SP)

# SHARED VALUE

Our business model is focused on creating and sharing value with all stakeholders. The energy generation and distribution, prioritizing renewable sources, are the basis for the development of economic activities in a sustainable way.

To grow our businesses with quality and efficiency, we invest in the training of our employees, and we value professionals aligned with our culture and corporate values. We prioritize people's safety and act with determination to minimize the risks of accidents with our team, third parties and communities in our concession areas.

We seek to ensure customer satisfaction and improve their experience. Therefore, we invest in network automation technologies, create new businesses and improve our service channels, as we have the goal of making CPFL Energia a company that is consistently recognized for delivering the best solutions in all areas of our business.

In our relationship with suppliers, we work to boost and strengthen the adoption of best practices and improve our entire value chain. We monitor the management of third parties that are part of our operations and dialogue with our partners to identify opportunities for improvement.

Innovation is fundamental in our strategy. Developing new business models, including by working closely with the scale-up and startup ecosystem, accelerates our ability to identify trends in the power industry and find new products that meet the needs of our customers.

Likewise, we manage our natural capital focusing on minimizing environmental impacts, maximizing efficiency in the use of natural resources, and conserving biodiversity. We continually improve environmental management by enhancing our processes and the technologies employed in our operations.

In order to complement those activities, we have strengthened our relationship with communities through the investments and projects developed by the CPFL Institute, in addition to the social responsibility activities conducted directly by the business units. This is how we consolidate a virtuous cycle of value creation for all our stakeholders.



Our business model **generates sustainable value for all our stakeholders across the six kinds of integrated report capitals** (financial, manufactured, natural, human, intellectual, and social and relationship)

## Stakeholders engagement

Individuals, groups or organizations that impact or can be impacted by our business are continuously engaged by our areas, with the objective of building strong and lasting relationships based on dialogue and trust, guiding strategic decision making, mitigating risks and generating value for CPFL Energia and society. **The Rules for Stakeholder Engagement**, available on our website, provides the guidelines and procedures adopted to manage this.

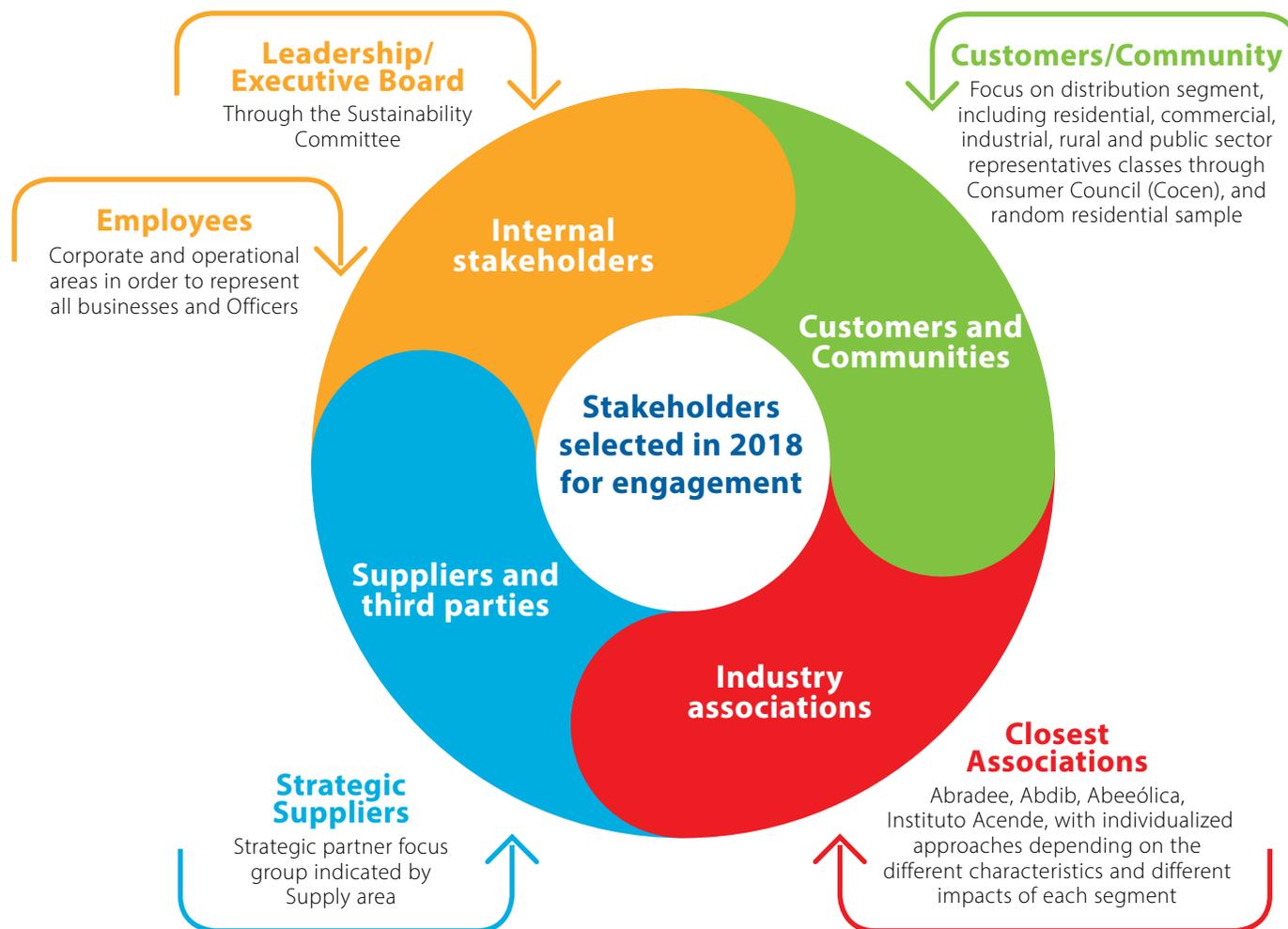
The prioritization of stakeholders considers the level of impact they exercise or may undergo when engaging with our activities, and the level of relationship maintained. These criteria are measured based on the frequency of interactions, the relevance of the processes in which each stakeholder is involved, and how they are considered in terms of the strategy. Priority stakeholders are included in the company's Stakeholder Map. The engagement strategy is defined according to the specific characteristics of each stakeholder in its relationship with CPFL and may include communication channels, online and telephone calls, events, meetings and surveys. It is up to each area to operationalize this strategy and maintain records to evaluate its effectiveness.

In 2018, together with the University of São Paulo (USP), we organized a broad process of listening to and engaging with our stakeholders, which provided the foundation for the definition of the material themes of this report and led to relevant insights for managing relationships with our stakeholders (learn more on page 89).

The vision of our shareholders directs the company's entire strategy, together with the positioning of our main stakeholders.



### CPFL Energia main stakeholders



# OUR PEOPLE

## Human capital development

Our human capital is composed of almost 13,000 employees. In 2018, we thoroughly revised our organizational structure, reshaping the workforce in order to be more efficient and productive in our activities. This evolution is driven by the focus on continuously improvement on our customers' experience and the strategy of creating new products and services suitable for society's and power sector's transformation.

Every two years, we conduct an organizational climate assessment survey with our employees based on the Great Place to Work (GPTW) methodology. The last edition was completed in 2017 and, based on its results, we developed action plans that seek to improve the work environment and carry out the main improvement opportunities found.

The various initiatives developed were grouped into **five work fronts**, composing the **Climate Plan**:

1

Sharing of Purpose and Goals

2

Promotion of Systemic Vision and Integration

3

Building Relationships of Trust

4

Celebrating and Recognizing Personnel

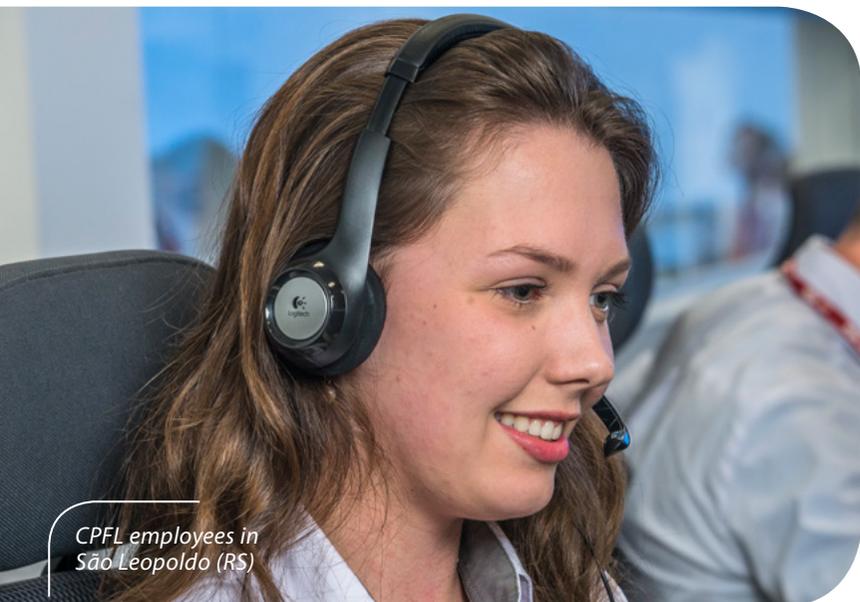
5

Proactivity in Career Development



CPFL employees in Campinas (SP)

Progress on the projects, based on design sprint methodology and with company vice presidents sponsoring each work front, was presented to the Internal Human Resources Committee. The expectation is that the impact of this work will be felt in the next edition of the study in 2019, with improvements in indicators.



CPFL employees in São Leopoldo (RS)

## Benefits

The benefits package is tied to the company's strategic vision in terms of attracting talent and retaining employees. Its configuration is defined according to specific business characteristics regarding the market practices in each region, meeting the requirements set forth in union or legal agreements, as regulated markets or not.

### MAIN BENEFITS OFFERED BY CPFL

Health care	Special Physical Assistance
Dental care	End of Year Toys
Private Pension Plans	School Supplies
Meal and Grocery Vouchers	Christmas Vouchers
Life insurance	Transportation Vouchers
Payroll Loans	Professional training
Daycare	

## Profile of our employees

With a history spanning a century, we have a diverse team of professionals. The interaction between different generations boosts our technical qualifications, with knowledge from leaders and from more experienced employees working alongside the restlessness and experimentation of the younger generations.

### NUMBER OF EMPLOYEES BY TYPE OF EMPLOYMENT AND GENDER<sup>1</sup>

	2017			2018		
	Men	Women	Total	Men	Women	Total
Full time <sup>2</sup>	10,324	2,407	<b>12,731</b>	10,408	2,497	<b>12,905</b>
Part time <sup>3</sup>	59	72	<b>131</b>	35	36	<b>71</b>
<b>Total</b>	<b>10,383</b>	<b>2,479</b>	<b>12,862</b>	<b>10,443</b>	<b>2,533</b>	<b>12,976</b>

<sup>1</sup> Considering companies fully controlled by CPFL Energia. Only two male employees have a fixed-term employment contract; all others hired under indefinite duration contracts.

<sup>2</sup> Contracts with more than 180 hours worked in a month.

<sup>3</sup> Contracts with up to 180 hours worked in a month.



**80%** Men  
**20%** Women



**71%** Southeast  
**29%** South



**29%** Up to 30 years old  
**61%** Between 30 and 50 years  
**10%** Over 50 years old



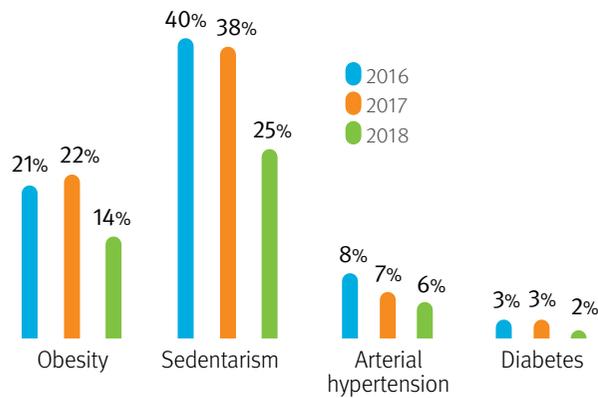
Meter reader in Caxias do Sul (RS)



## Health Figures

Every year we evaluate and monitor our employees' health. In 2018, we presented significant improvement, mainly in the obesity and sedentarism rates.

### CPFL HEALTH FIGURES



## Quality of Life

We provide several programs aimed at improving our employees' health and well-being in order to contribute continuously to the construction of a healthier and more motivating work environment. Through the activities offered, we encourage our professionals to adopt healthy habits such as the practice of sports activities and adequate nutrition. Some of the different modalities of the offered programs are as follows:

- **Programa Fale Comigo (“Talk to Me Program”)**

Support for personal issues, focused on matters related to psychological care, social services, legal services, financial management, and speech therapy.

- **Programa Nutrir (“Nurturing Program”)**

Professional services from nutritionists, with individual and group consultations, goals-setting and personalized orientations, as well as the psychologists' support.

- **Running Group**

We offer our employees the opportunity to participate in a running group, through which we provide access to company sponsorship of registration fee for one competition per month.

- **Fitness Center**

We have a total of five locations with internal gyms for our employees.

- **Gym incentives**

At locations that do not have gym facilities we offer to subsidize costs.

- **Sports Workshops**

We offer employees at headquarters in Campinas the chance to participate in sports workshops in the modalities of men's and women's soccer, basketball, and volleyball.

- **SESI Games**

Every year the company sponsors employee participation in SESI games as a way of encouraging sports activities.



## Programa Família Energia (“Energy Family Program”)

Reinitiated in 2018, this program invites employees' family members to celebrate along with CPFL Energia, with five events during the year:

- May: Mother's Day
- June: Open Doors
- August: Father's Day
- October: Children's Day
- December: Family Day and Honored Guests

The activities cover visits to the company and to the work environment, theater and recreation activities, awards ceremonies, and presentations about the company's main activities. In the past year, there were more than 2,500 participants at more than 30 locations.

# Safety: a non-negotiable value

The safety of employees, communities, and the contractors who provide services to business units is a priority in the management of our human capital. A set of ongoing initiatives ensures the spread of the safety culture at the company and greater awareness for teams working in higher-risk activities.

The Sistema Primeiro as Pessoas (SPAP – “People First System”) is a platform that was developed at CPFL to improve health and safety management and governance, which has contributed to assertive actions by leaders and managers with field and administrative teams.

We have three different health and safety committees, covering 100% of employees and the different businesses of the companies, ensuring the efficient and strategic management of risks related to the subject.

## • Health and Safety Committee (CSS)

under the guidance of CPFL Energia senior management, aims to assist in the management of strategic actions focused on preventing accidents and promoting the health of employees.

## • Operational Safety Committee (COS)

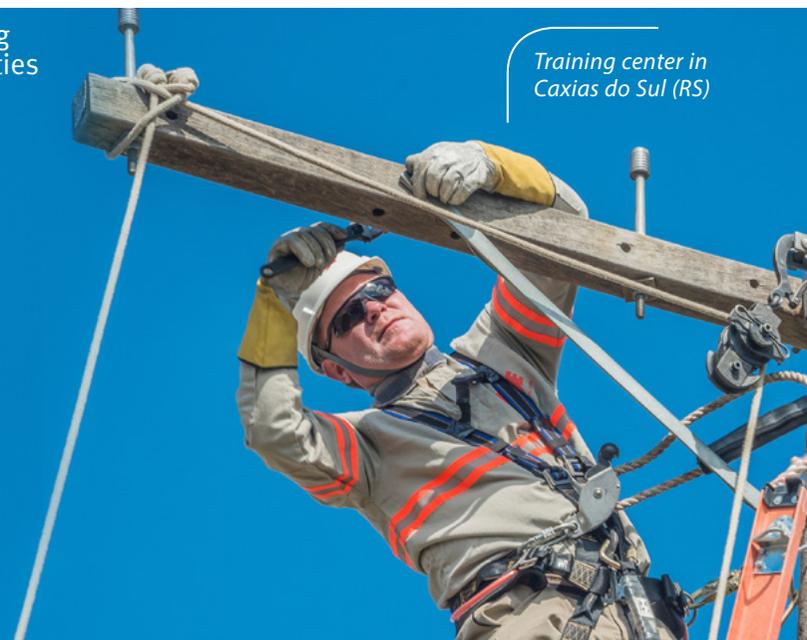
composed of representatives from several Group businesses, aims to reinforce accident prevention in operational activities, continuously monitoring the results and streamlining the identification and resolution of problems, as well as facilitating decision making.

## • Internal Accident Prevention Commissions (CIPAs)

set up according to applicable legal requirements, include unit employees in the discussion of relevant topics to their day-to-day and in suggestions for health and safety improvements. In 2018, we included 113 CIPAs in our operations, with a total of 1,096 employees acting as CIPA representatives.



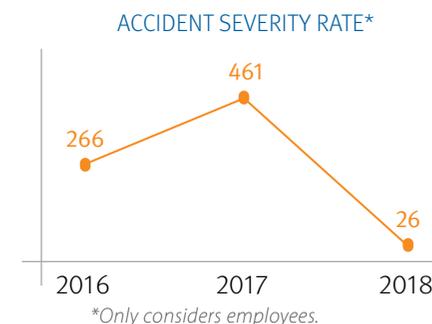
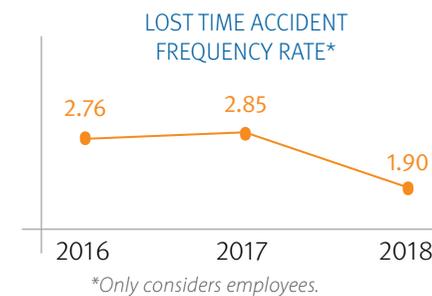
Training center in Caxias do Sul (RS)



In 2018, our investments to strengthen the safety culture totaled R\$ 3.9 million, including direct actions, training, communication campaigns and awareness initiatives. This amount also includes investment in initiatives that benefit local communities and other external stakeholders, such as the Safety Campaign with the Population.

Continued efforts to promote a safe environment, such as Internal Workplace Accident Prevention Week (SIPAT), safety inspections, behavioral monitoring, the Safe Practice Index (IPS), Safety Dialogues (daily for operations and weekly for the administrative areas), communications and several internal campaigns, contributed decisively to the reduction in the frequency and severity of accidents in 2018.

Disciplined application of security processes and investments in the area were reflected in the significant reduction in employee accidents. Even so, unfortunately, we recorded two contractor deaths, one of them resulting from a traffic accident and the other resulting from a private vehicle crashing into the demarcated work area. The two occurrences were investigated, with incorporation of the lessons learned and discussions in Safety Dialogues.





## Prevention and awareness

We continuously promote actions and programs to strengthen employees', contractors' and the population's culture of safety. The launch of the Guidelines for Occupational Health and Safety facilitated the communication of rules and premises related to the topic and of our non-negotiable commitment to promoting a safe work environment. In terms of promoting the safety culture with communities, the Safety Campaign with the Population deserves mention (learn more in the box).

Launched in 2018, Projeto Vida 100% ("100% Life Project") is an example of distribution company employees' engagement in zero accidents effort. This model, which involves conducting roundtables to discuss the causes and reasons of accidents and incidents, has already been adopted at RGE and CPFL Paulista, with 524 participants and 1,681 opportunities for improvement identified through the dialogue. At CPFL Piratininga and CPFL Santa Cruz, where the project is underway, 512 professionals have already been engaged and almost 2,000 opportunities for improvement have been noted.

Integration of the corporate and operational teams dealing with Health and Safety was intensified during the year with the Partnership and Consulting Project. The main objectives of the initiative are: to strengthen the Occupational Health and Safety Management System, to encourage greater communication, interaction and partnership among the teams, to ensure the alignment of concepts, information and parameters, and to promote the personal and professional development of teams. Training these employees was done through multiple forms of teaching, and was also the focus of the Health and Safety Track, launched last year in the context of the CPFL University. The first two modules were implemented in 2018 and another three are planned for 2019.

## Awareness raising in the general population

For a second consecutive year, CPFL Energia distribution companies carried out the Safety Campaign with the Population, created to raise awareness about the risks of accidents involving the power grid among the population. The objective is to improve awareness among communities in identifying risky situations and taking preventive actions. In 2018, the campaign organized 14 blitz and carried out several communication and awareness campaigns on radio and TV stations, benefiting the population in 658 Brazilian municipalities. On the Internet, there were 191,000 hits to the company site, and the reach in social networks surpassed the mark of 1.4 million users on Facebook and 1 million users on Twitter.

Most accidents involving our power grid are linked to construction and painting activities, carried out without the necessary precautions to avoid the risk of electric shock. The current economic context, which is still challenging, contributes to increasing unemployment and, with it, informal work, especially in construction. This scenario increases the likelihood of risky situations, since people who are not properly qualified to work close to the electrical network end up exposing themselves to careless contact with power distribution wires.

Despite all our efforts, and a decline in the number of fatal accidents, we recorded a total of 64 accidents, of which 49 were classified as minor. We remain committed to improving all indicators, with investments and actions planned for 2019.

14 blitz

658 municipalities affected

R\$ 3.8 million invested in the Safety Campaign with the Population

191,000 visits to campaign microsite

2.4 million users impacted on social networks

SAFETY INDICATORS FOR POPULATION



# Career and development

The preparation and qualification of our professionals are strategic for the growth of our business as the energy sector undergoes transformations that prioritize renewable sources in the matrix, new technologies, and providing the client with greater power of choice.

Based on these guidelines, we structured our Talent Pool in 2018 and brought together professionals who excelled in performance appraisal processes and were identified as having the potential to occupy leadership positions in alignment with our corporate values. The criteria for defining the Talent Pool include critical knowledge and professional expertise, the results of competency and potentials assessments, as well as the Succession Plan. The first team was formed by 45 employees who underwent development actions to strengthen the skills required for professional development, such as coaching, mentoring, academic training, job rotation, leadership development, and others.

We also have a succession map that indicates who the potential successors are for all managerial and executive positions and that identifies the degree of security for each position.

Our employees' development is guided by an annual performance-evaluation process, with methodology consolidated at the company. This model provides an approach with distinct profiles and stages of evaluation for different professional and leadership stakeholders. The analyses consider behavioral aspects, potential, and reaching of contracted goals, and can be performed by peers, superiors, and subordinates, depending on the functional category. The evaluations go through calibration committees and time for employee feedback in which their Individual Development Plan (PDI) is defined.



## PERCENTAGE OF EMPLOYEES WHO RECEIVE PERFORMANCE EVALUATION<sup>1</sup>

	2017	2018
<b>By gender</b>		
Men	69%	76%
Women	75%	82%
<b>By job level</b>		
Leadership <sup>2</sup>	22%	64%
Other employees	73%	73%
<b>Total</b>	<b>70%</b>	<b>77%</b>

<sup>1</sup> The percentage of employees evaluated is less than 100% as a result of the eligibility criteria for the performance evaluation process. Professionals with less than 3 months of service at the company prior the start of the process do not participate, as well as apprentices, those on leave, and retirees on disability leave.

<sup>2</sup> Includes directors, managers, coordinators, supervisors and leaders.



CPFL employees in Campinas (SP)

In 2018, we carried out **1,600** promotions and **1,500** internal lateral moves by employees. This figure demonstrates the **value of individual initiatives and proactivity in professional development**

The cycle carried out in 2018 considered employee deliveries between January and December 2017. In the past year, 9,700 employees were evaluated, which represents 77% of the staff.

Another effort during the year was CPFL Energia's working along with universities, seeking to expand the company's profile and attractiveness to young professionals with the potential to work in the energy sector. Our executives participated in job fairs and visited universities to provide presentations about our business and the power sector. As a result, the current edition of the Internship Program that began in 2019 received more than 20,500 registrations for a total of 100 slots - a record demonstration of interest.

As part of the continuous training of our employees, we have an ample portfolio of training and incentives offered by CPFL University (learn more on the following page). One of the training approaches is Learning Tracks. Launched in 2014, these training sessions are organized into modules and enable a systematic view of key company processes, such as energy management, regulatory affairs, and project and works development. We also offer a Professional Training Program, which includes subsidies for undergraduate, extension, post-graduate, and IT courses, among others, with reimbursement of up to 80% of monthly fees. In 2018, R\$ 2.9 million was invested on this front, benefiting 1,000 professionals at our company.

The Knowledge Management Program, implemented in 2011, focused on the Commercial Executive Officers in the last year. The initiative provides a set of tools to ensure the adequate management of intellectual capital in key areas at CPFL Energia. In the context of the program, we also mapped out 135 employees who are already retired or in the pre-retirement phase, for whom we are drawing up action plans that contribute to retaining the critical knowledge held by these professionals.



Closer work with universities and a **training and incentives portfolio** offered by CPFL University enable **continuous training** of our employees

## CPFL University

The CPFL University is the main vector for our employees' development. Having completed ten years of existence, we implemented a redesign of the brand and its portfolio of activities, in alignment with the company's strategic pillars. Based on a benchmarking analysis and senior leadership engagement, we identified the need to direct CPFL University to lead our professionals to a culture of learning and leadership that includes skills in multi-business systems, innovation, agility, and customer focus, in order to improve the personal and professional development of each individual.

With this new positioning, CPFL University believes that "Education Expands Potentials" (the essence of the brand). This concept is the basis for the management of our activities, such as degrees, courses, tracks, lectures, or forums that can be offered in person or in an online format in the context of our four schools:

### School of Operational Excellence

focused on serving the business areas responsible for the electric system's operation

### School of Excellence in Service

focused on meeting the demands of training sessions aimed at customer relationship channels and social media

### Leadership School

formed by programs and training sessions for developing leadership, managers and executives of CPFL Energia

### School of Business and Innovation

training that supports the development of our business, focusing on reaching strategic levers

Employee at the CPFL University library



CPFL University also includes a portfolio of transversal initiatives that help employees in their development trajectory, such as the Educators Program, news clipping activities in our library, partnerships with institutions, and the offer of in-company English and MBA courses. These opportunities are available to professionals and, in some cases, extended to their families.

In addition to directly benefitting our employees, CPFL University has a positive impact on society by offering regular training courses. The School of Electricians and the School of Designers are two initiatives that contribute to the training of skilled labor (read more on page 84).

### In 2018:

**R\$ 16.2 million** invested

**72 leadership** training groups

**More than 624,000** hours of training

**More than 300 training** groups for NR 10 and 35 (safety work)

# SUPPLIER MANAGEMENT

In order to improve the relationship we have established with our suppliers, we have developed and are implementing a strategic supply chain plan, with long-term projects and objectives to improve the management of our supply chain in the logistics, sales and qualification and supplier development sectors.

In terms of the qualification of suppliers, our management relies on the Supply Base Management (SBM) tool. The platform allows us to evaluate companies mapped along aspects of financial, security, and technical performance, documentary and legal compliance, and ethics, reducing our company's exposure to operational and financial risks. This process is carried out on a continuous basis, every month, leading to an evaluation grade for suppliers and helping develop action plans for improvement.

Two of the key developments in the SBM evaluations carried out over the past year were the increase in the number of critical suppliers mapped out, and the improvement in performance indicators. In addition, we refined the feedback methodology for evaluated companies, increasing the effectiveness of action plans in improving processes. In 2018, 92 strategic partners were identified as being at risk of generating negative environmental and social effects, as they were engaged

in the specialized technical services and supply of materials. All of them were evaluated and no significant impact was identified.

We also have a formal process for the identification of environmental and social risks in the approval process, through a self-assessment report based on aspects such as environment, social responsibility, health and safety, and quality. For current suppliers, evaluation visits are carried out based on these same aspects, in which the working conditions, respect for the environment, and attention to social responsibility are verified. In 2018, 51% of strategic and critical suppliers were evaluated at the time of hiring. With regard to new suppliers, 16 partners were evaluated, representing 59% of the total in this group.

In the purchasing area, our efforts were directed towards the implementation of the Category Management methodology, structuring the full categorization of the scope of materials and services purchases, and establishing groups by possible synergy. In this way, we established specialized focal points (category leaders) among buyers, working with the management of processes, total costs, suppliers, risks and stakeholders.



We promote the **qualification and evaluation** of strategic and critical partners for our businesses, with monthly evaluations through a **supplier management platform**

More than **3,000**

suppliers worked in partnership with CPFL Energia in 2018

**122 strategic partners**

together represent more than 80% of our transactions with suppliers

**63 critical partners**

as well as being strategic, present high level of criticality for the continuity of operations or can put our reputation in risk



CPFL Soluções fleet



## Prêmio Mais Valor ("More Value Prize")

This initiative publicly recognizes suppliers who have stood out for their performance in our supply chain and stimulates innovation in solutions. In its ninth edition, in 2018, the Most Value Award brought the theme "Innovation, our Conducting Wire" and awarded 15 companies for excellence in the partnership they establish with our company.

The winning companies were selected by a committee, whose evaluation considered the following criteria: safety at work, excellence in service, quality, term, sustainability and social responsibility. The winners received the award in a ceremony held at the headquarters in Campinas.

In addition, we diagnose and define purchasing category profiles, properly directing negotiations in accordance with their allocation. This mapping has assisted in defining suppliers with whom we can strengthen partnership relationships, leading to innovation, minimizing risk, and adding value. In addition, this ensured greater engagement with the various business areas, enabling the identification of new scenarios and opportunities for improvement, generating gains such as visibility and control of contracts, closer relationships with suppliers, and control over and reduction of total cost and increase in productivity.

On the logistics front, supply operations underwent changes with the opening and modernization of two new distribution centers – one in Piracicaba (São Paulo state) and the other in Esteio (Rio Grande do Sul state). With these structures, we achieved greater efficiency and agility in the delivery of materials and products critical to the operation of distribution companies in our concession areas.

## Value Network

The Value Network is an initiative we developed to encourage our suppliers to share experiences and best practices that generate value for all the stakeholders with whom we interact. The three events held in 2018 were

attended by 149 companies and addressed issues such as quality, ethics, labor reform, job security, future scenarios and new business.

## Third-party management

More than 8,000 outsourced workers provide services to the business units. Managing our relationships with the suppliers responsible for hiring these people is strategic to maximizing the expected outcomes of our business.

Nect, a company in our Shared Services Center, performs this activity through the Third-Party Documentation Management Cell. In 2018, close to 7,800 third parties covered by 269 different contracts signed with 130 suppliers were evaluated and monitored.

The team performs constant checkups of the documentation and labor records of outsourced workers, seeking to ensure that these contracts comply with all legislation and standards applicable to the sector. We also have a team of safety auditors who carry out field inspections of these people's working conditions.

Both evaluations are part of the grade given to suppliers of services integrated with our Supply Base Management (SBM).



The sharing of **experiences** and **recognition of best practices** among our suppliers are facilitated by initiatives such as the **Value Network** and the **More Value Prize**

## FOCUS ON CUSTOMERS

Customer satisfaction is at the heart of our strategy, and our investments are aimed at continuously improving the quality of the service we provide. The automation of distribution networks, the digitization of service channels, the constant search for and incorporation of new technologies, among other initiatives, aim to improve our operations and directly benefit our customers.

The result of these efforts can be measured in the awards and recognitions we receive annually (learn more on page 16). In 2018, CPFL Santa Cruz won the IASC Award for best distribution company in the South and Southeast regions, in the medium-sized companies category. Our companies were also finalists in the following categories:

- **Southeast:** more than 400,000 consumer units - CPFL Paulista
- **South:** more than 400,000 consumer units - RGE Sul and RGE
- **Brasil:** concessionaires with up to 400,000 consumer units - CPFL Santa Cruz and RGE

### Automation and network safety

Ensuring the availability and reliability of energy supply is related to long-term demand planning, the asset-maintenance investment plan, and various network improvement initiatives. We annually revise the Electric System Expansion Plan, which establishes a diagnosis of the market conditions over a 10-year horizon in order to prioritize investments in the expansion and service capacity of distribution companies. The definition of efforts related to the maintenance of the installed park takes place over a period of five years, focusing on improving the quality of supply, the safety of employees and the population, and the adequate management of the useful life of the assets. In this process we define the periodicity and scope of preventive and predictive maintenance, and the resources to be allocated



Customer service

to ensure the efficiency and robustness of the distribution system. These plans are deployed annually and are accompanied by key indicators, with synergistic action across several areas of the company.

Our investments in distribution networks totaled R\$ 1.5 billion in 2018 - considering the last three years, these investments exceeded the mark of R\$ 4.5 billion. These resources were vital for modernization projects that reduce interruptions in power supply and, consequently, increase customer satisfaction.

### INVESTMENT IN ITEMS LINKED TO RELIABILITY AND AVAILABILITY OF ENERGY (R\$ MILLION)<sup>1</sup>

	2016	2017	2018
Customer Service <sup>2</sup>	211.3	314.3	283.8
Support for market growth	334.1	397.6	228.8
Maintenance and improvement of the electrical system <sup>3</sup>	506.1	1,010.4	997.5
RGE Sul <sup>4</sup>	276.0	0.0	0.0
<b>Total</b>	<b>1,327.5</b>	<b>1,722.3</b>	<b>1,510.1</b>

<sup>1</sup> Historical data restated due to changes in accounting methodology.

<sup>2</sup> Includes recovery of commercial losses. Net amount of special obligations.

<sup>3</sup> Includes special projects, personnel capitalization, MSO and logistics operator.

<sup>4</sup> RGE Sul data from 2016 consider the global values invested.

## Among the best:

CPFL Energia distribution companies stand out in the Brazilian scenario due to their **customers' supply continuity**. See the main highlights in the national ranking:

**CPFL Piratininga**  
1<sup>st</sup> place in SAIDI  
and SAIFI<sup>1</sup>

**CPFL Paulista**  
2<sup>nd</sup> place in  
SAIFI<sup>1</sup>

**CPFL Santa Cruz**  
2<sup>nd</sup> place in  
SAIDI<sup>1</sup>



<sup>1</sup> SAIDI (System Average Interruption Duration Index) and SAIFI (System Average Interruption Frequency Index).

At the end of 2018, we had in our network more than 9,800 automatic reclosers, equipment that facilitates the identification of defects and, in some cases, remotely solve interruptions of supply, reducing the displacements of technical teams. The pace of recloser deployment has been intense: in 2018 alone, 1,600 units were installed, and another 1,100 units are planned for 2019, reaching a total of 10,900 units in operation.

We have also focused efforts on the communication infrastructure of our assets. At CPFL Paulista and CPFL Piratininga, we expanded the fiber optic base to 57 new sites, substations, advanced stations, and service agencies. In addition, we implemented equipment that expanded the capillarity of CPFL Energia's radio backbone in the São Paulo state, strengthening the reliability of connections at substations and network automation equipment.

The centralization of the Integrated Operation Centers (COIs) was another highlight of the year. The city of São Leopoldo was added to the RGE COI, previously located in Caxias do Sul, alongside operations of the RGE Sul COI, consolidating into a single center both areas of the unified concession. Campinas received the operations of the CPFL Santa Cruz COI, which began working in synergy with the CPFL Paulista COI in the same location.



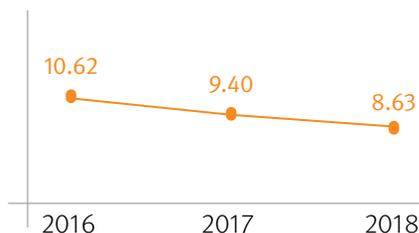
*Integrated Operation Center (COI) in São Leopoldo (RS)*

Regarding the operating systems, we began operating using a single mobility tool: the CPFL Workforce System - Integrated (CWSi). This change provided gains in the planning, routing and execution of commercial and emergency services, allowing greater effectiveness in the registration, monitoring and control of field activities, as well as managing teams' productivity. The system uses a smart algorithm to automatically define and dispatch commercial services as the first step in the strategy of automating team dispatches. One positive outcome of this implementation was the improved performance in regulated commercial services, such as inspection processes and connection of new customers.

All of these investments contributed to reducing the number and frequency of disruptions. Two main indicators evaluate the performance of the distribution companies in relation to the quality of the service provided: SAIDI (System Average Interruption Duration Index) and SAIFI (System Average Interruption Frequency Index) are monitored continuously by all companies in the sector and by the Brazilian Electricity Regulatory Agency (ANEEL), in accordance with the concession regions.

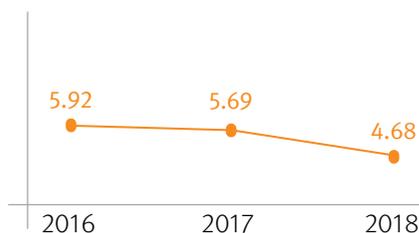
In 2018, we achieved record results, and our performance improved 8% for SAIDI and 18% for SAIFI. This result reflects the cycles of investments in the system, improvement of the mechanisms of control, and actions by our employees and outsourced professionals.

CONSOLIDATED SYSTEM AVERAGE INTERRUPTION DURATION INDEX (SAIDI) (HOURS)\*



\*Calculated based on weighted average number of customers of each distribution company and value calculated for SAIDI.

CONSOLIDATED SYSTEM AVERAGE INTERRUPTION FREQUENCY INDEX (SAIFI) (TIMES)\*



\*Calculated based on weighted average number of customers of each distribution company and value calculated for SAIFI.



We achieved improvements of **8% for SAIDI** and **18% for SAIFI** last year, and three of our distribution companies stood out as **the best in the country** using these indicators

SYSTEM AVERAGE INTERRUPTION DURATION INDEX (SAIDI)

	2016	2017	2018
CPFL Paulista	7.62	7.14	6.17
CPFL Piratininga	8.44	6.97	5.93
CPFL Santa Cruz <sup>1</sup>	8.47	6.20	6.01
RGE	14.44	14.17	13.43
RGE Sul	19.45	15.58	15.56
<b>CPFL Energia (consolidated)<sup>2</sup></b>	<b>10.62</b>	<b>9.40</b>	<b>8.63</b>

<sup>1</sup> The historical data for CPFL Santa Cruz were restated to reflect the unification of the distribution companies CPFL Santa Cruz, CPFL Jaguarí, CPFL Mococa, CPFL Leste Paulista and CPFL Sul Paulista, which occurred on January 1, 2018.

<sup>2</sup> Calculated based on weighted average number of customers of each distribution company and value calculated for SAIDI.

SYSTEM AVERAGE INTERRUPTION FREQUENCY INDEX (SAIFI)

	2016	2017	2018
CPFL Paulista	5.00	4.94	4.03
CPFL Piratininga	3.97	4.45	3.88
CPFL Santa Cruz <sup>1</sup>	6.25	5.12	5.09
RGE	7.56	7.74	6.30
RGE Sul	9.41	7.62	5.89
<b>CPFL Energia (consolidated)<sup>2</sup></b>	<b>5.92</b>	<b>5.69</b>	<b>4.68</b>

<sup>1</sup> The historical data for CPFL Santa Cruz were restated to reflect the unification of the distribution companies CPFL Santa Cruz, CPFL Jaguarí, CPFL Mococa, CPFL Leste Paulista and CPFL Sul Paulista, which occurred on January 1, 2018.

<sup>2</sup> Calculated based on weighted average number of customers of each distribution company and value calculated for SAIFI.

## Digitalization of services and operations

The digitalization of service tools and order dispatching systems, driven by the expansion of the internet and of communication tools, benefit our customers through a more agile and efficient service. To further improve this relationship, we map out and study requests that generate contacts with our companies to identify opportunities for improvement and to develop new service channels.

### • Digital ordering

The customer no longer has to drop by a service agency, and instead can send the documents through digital photos.

### • Real-time priority

Field electricians receive the service order through an internally developed application that can dispatch orders to the technician in real time, in order of priority and considering the best logistics.

### • Online renegotiation

We provide a virtual channel so that customers can renegotiate debts with more agility and total transparency.

## Certified ombudsman

In 2018, we obtained certification for our Ombudsman's Office in ISO 9001, an international standard that ensures the quality management of products and/or services of a company. This achievement is the result of investments made over the last two years to advance our internal processes in agility and quality to serve our customers.

In 2018, **2 million customers** received their invoices by email. This channel facilitates **online payments** and avoids having to print out and mail bills



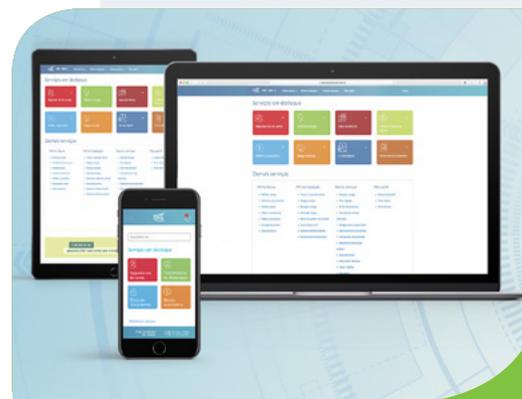
In our relationship with customers we are always mindful of their demands and expectations, through structured surveys and services across various channels – with a priority in digital relationship but maintaining the quality of other channels - as well as having a presence on social media. On Facebook and LinkedIn, we pioneered the use of the hashtag "#pracegover" ("#fortheblindtosee"), which adds audio description to videos and images, making it easier to communicate with the visually impaired. For this group, RGE and RGE Sul also provide invoices in Braille, requiring only that the customer register for this billing alternative.

We were pioneers in using audio description for published images and on social networks with **#pracegover hashtag**

## Improvement in service indicators

After completing the commercial service digitalization project we were able to **reduce the total volume of complaints by 61%**. Customer complaints about meeting service deadlines were reduced by 84% and services provided outside of stipulated hours were reduced to virtually zero. By 2015, they accounted for 8.2% of all commercial services performed. In 2018, only 1% of commercial services (new connections, changes of ownership, among others) **and 0.1% of complaints were resolved after the deadline established** by regulatory standards.

The number of complaints also decreased significantly: in the first levels of service, 135,000 complaints were registered, compared to 150,000 in the previous year; **and at the Ombudsman's office the number of customer complaints decreased from 21,000 to 16,000** from one year to the next. In addition, the FER indicator, which measures the number of complaints from every thousand customers, reported an index of 4.99, a 10% improvement from 2017.



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## Combatting losses

In 2018, we stepped up our efforts to reduce global energy losses in our distribution network. We increased the number of inspections and public lighting re-registration campaigns, and intensified disconnections in irregular areas.

In addition, we redoubled the fight against administrative losses of energy by adopting a system that allows us to cross-reference large volumes of information across several databases and identify possible process failures, reaching a record level of energy recovery. Even with these actions, we maintained a loss level that was very close to 2017. With the continuation of the intense work carried out throughout 2018, the expectation is that the indicator will present a positive response insofar as the expected improvements in the macroeconomic scenario come to fruition.

LOSSES IN ENERGY DISTRIBUTION<sup>1</sup>



<sup>1</sup>Historical data restated.



## Energy Efficiency

In order to stimulate more intelligent and efficient consumption by our customers, we count on ANEEL's Energy Efficiency Program. With it, we seek opportunities and offer solutions to reduce energy consumption in homes, businesses and industries, including hospitals and public agencies, among others. Among the activities developed are the replacement of obsolete equipment and educational initiatives aimed at combating waste and promoting the safe use of energy. In 2018, we invested R\$ 67.6 million in the Program, an increase of 25% in relation to the R\$ 54.0 million invested in 2017. We concluded the presentation to ANEEL of the results of our 44 projects:

*Energy Efficiency projects in Hospital in Campinas (SP)*

- 29 GWh saved** through the supported initiatives, equivalent to the annual demand of 12,000 residences\*  
\* Considering average monthly consumption of 200 kWh.
- 2,248 tons of CO<sub>2</sub>** equivalent (tCO<sub>2</sub>e) avoided, equal to planting **13,485 trees**
- 254,331 bulbs exchanged**
- 66,287 residences served**
- 1,370 connections regularized**
- 149 public buildings benefited**
- 19 hospitals and NGOs in healthcare**
- 257 municipalities impacted**
- 112,428 students and teachers sensitized**
- 557 schools served**

## Get to know some of our energy efficiency projects



### Litro de Luz

With the participation of volunteers and the local community, we installed 33 light poles in a low-income residential condominium in Sorocaba (São Paulo state). Developed by the Litro de Luz NGO, the project encourages the use of PET bottles, PVC pipes, solar panels, LED lamps and batteries for the installation of streetlights. In addition to energy efficiency, the action promotes the engagement and empowerment of the local community.

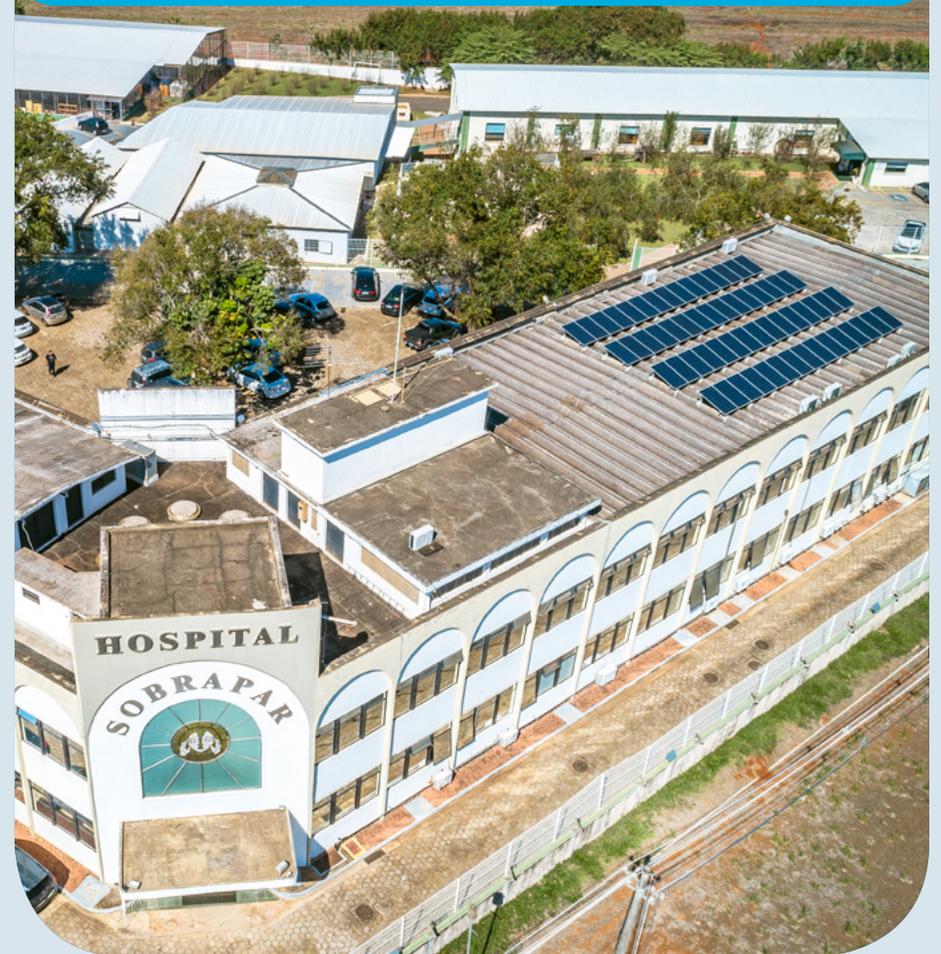


### Home ITU

The project promotes the installation of photovoltaic generation systems of 1.3 kWp at the residence of customers who use Intensive Treatment Units (ITU), a piece of electrical equipment essential to their survival. The solution, which provides average monthly output of 150 kWh, reduces the monthly energy cost for these customers.

### Photovoltaic systems in hospitals

We initiated efficiency projects in Public Hospitals with the implementation of photovoltaic generation systems that have total generation capacity of 1,366 kWp. These health institutions will benefit from lower power costs.



# DESAFIO CPFL & TURMA DA MÔNICA



## Turma da Mônica App

We launched the CPFL and Turma da Mônica Challenge, which provides information on energy efficiency through an application that can be downloaded on Android smartphones.

## School Efficiency

We invested R\$ 125,000 to install a 15 kWp solar photovoltaic power plant at the Prof. Dimas Mozart e Silva State School in the city of Taquaritiba (São Paulo state) and swapped out conventional lights for LED technology. The expectation is that the investment will provide savings of 85% in the volume of energy consumed by the school. The volume saved would be sufficient to supply eight families with monthly consumption of 200 kWh.



## RGE on the Square

The activity promoted habits for optimizing energy consumption and reducing costs. The site has space for customer training and a school trailer offering courses on efficiency and power grid safety. A truck simulates a residence with varying degrees of efficient electrical equipment and invites residents to take note of the comparisons that show possible waste.



## CPFL in Schools

The educational project empowers primary school students in the municipal and state networks to be conscious consumers of electric energy and to be aware of the risks of accidents with the electric grid.



SDG

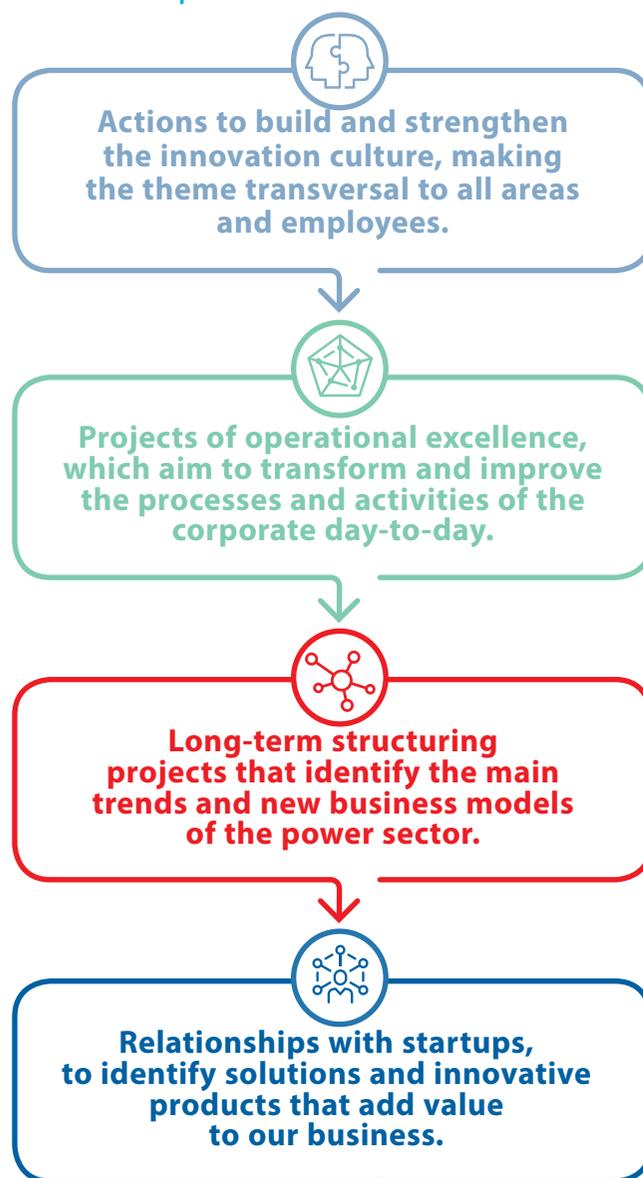
## Innovation for growth

Innovation is a lever for business growth and diversification of our company portfolio. Our investments and projects increase operational efficiency and identify long-term opportunities that drive our research and development capacity to maintain our leading role in the transformations in the electricity sector. In 2018, we invested a total of R\$ 47.3 million in research and development projects, in line with the ANEEL P&D Program. In only distribution, we invested R\$ 33.9 million, an increase of 18.5% over the last year, reflecting both the changes determined by the regulatory body and our strategy of action.



Participants of the CPFL Inova first edition

## How we study and practice innovation



## INNOVATION CULTURE

To promote an innovation culture through all areas of the company, we have structured a training and development program with CPFL University called the Innovation Trail. About 400 employees from 232 business areas were trained in 2018, accessing practical tools for collaboration, multidisciplinary, empathy and experimentation. The purpose was to prepare them to implement processes of change in their activities and become multiplier agents in the company.

We also structure an internal consulting team that works in partnership with the business to develop innovative solutions. In this methodology, a specialist is assigned to, together with the administrative and operational areas, to address the challenges in a creative way (using design thinking tools, for example) and to innovate in the application of a solution.

Also worthy of note is the Innovation Week, whose edition of 2018 included exhibitions of projects carried out by the company and guest lectures to discuss the theme with our collaborators, such as presenter Marcelo Tas.

## Structural projects

Structural research and development projects are carried out with a long-term vision in order to identify trends and pathways for new businesses in a scenario of transformation in the power sector. Among them, three deserve attention.

### Energy Storage Program

Consisting of three projects applied to the distribution, generation and transmission businesses, the program will involve the trialing of new technologies, the evaluation of the impacts generated by battery applications, and the validation of new business models.



SDG

### Analytical Center

Implementation of a laboratory for big data analysis using machine- and deep-learning techniques. We carried out a pilot project that sought to reduce non-technical losses and improve team-dispatch algorithms, ensuring greater assertiveness in the identification of irregularities in the field.



### Solar Roofing Project

We studied the possible impacts of the massive entry of solar photovoltaic generation into the distribution network. The study provided a real laboratory, with 231 installed systems, that enabled the comparison of network conditions before and after the entry of the distributed generation. The knowledge generated was shared with society and experts through articles, presentations, visits to the installation sites, and the offer of a basic course on photovoltaic solar energy for more than 900 participants.



Electric vehicle

## Emotive Project

In 2018, we concluded the Emotive project, one of the most complete evaluations of the impacts of electric mobility in Brazil. Over the course of five years, we built a comprehensive study, which included proposals of a business model for customer recharge infrastructure, which would enable the country to expand the number of electrical recharge stations and stimulate the increase of electric vehicle users. The project included the installation of 25 electric charge stations, of which 10 in the Metropolitan region of Campinas were public, and the circulation of 14 electric cars. More than R\$ 17 million were invested in the study, which contributed to regulations by the Brazilian Electricity Regulatory Agency (ANEEL) regarding the recharging of cars and to the demystification of the issue in society.

One of the main conclusions of the Emotive Project is that the Brazilian power sector is prepared to absorb the growth of energy demand with the expansion of the number of electric vehicles in operation in the country. Tests show that, considering a 5% penetration rate of electric vehicles in the total fleet, 80% of the distribution networks would not need adjustments or additional investments to meet the new demand.

## CPFL Inova

CPFL Inova is the open innovation program we created to bring our business closer to the startup ecosystem. The initiative completed its first round with 12 accelerated scale-ups\* and the generation of R\$ 6 million in project development with selected companies.

Launched in 2017, CPFL Inova has received submissions from 496 organizations interested in participating in the program. In February 2018, we elected 20 finalists whose projects, adhering to our innovation strategy, could be presented in pitch meetings to the examining board. After this step, we selected 12 scale-ups for acceleration.

During the seven months of this phase, the entrepreneurs selected by CPFL Inova received

more than 60 hours of training with 35 mentors from Endeavor, the project's partner accelerator, and 30 executives from CPFL Energia. Scale-up leaders were able to trade experiences with mentors and other participating entrepreneurs, discussing the challenges for growth and sustainability of their business.

The participating companies registered growth of 48% in total revenues, reaching R\$ 77.8 million, and a 39% increase in the number of employees, from 281 to 389.

*\* Scale-ups are companies that stand out for having a business model that can achieve gains in scale, with competitive and technological differentials that add value to products.*



## Operational excellence

Innovation has the potential to transform and improve operational and administrative processes, enhancing the efficiency and competitiveness of our businesses. A practical example of how this development occurs is the initiative to automate processes via Robotic Process Automation (RPA), which seeks to automate different operational tasks.

The initiative started in 2017 and presented its first results in 2018. Two teams are working together: Business Excellence - Business Process Management - and Information Technology, forming the Operational Excellence Center.

As employees carry out their work, the routine operational tasks performed by the employees are analyzed to identify those that could be automated, eliminating the need for human interaction. After that, requests are prioritized in terms of where there could be greater productivity gains. Currently, about 40 robots are in production at CPFL Energia, and will be able to perform more than 40,000 transactions per month.

The main advantage of process robotization is the strengthening of the analytical capacity of our human capital. Our employees are more capable of carrying out activities that add value to the company. RPA is the first step in building robust processes that can be applied to artificial intelligence and big data.

During the course of this digitization process, we set up a laboratory to analyze data generated by the business through machine learning tools. In this context, we began pilot projects that seek to reduce non-technical losses at the distribution companies and improvements to the algorithms for dispatching teams, in order to generate more efficiency in the identification of problems.

### CPFL Inova scale-ups

 Click on the names to get to know them better

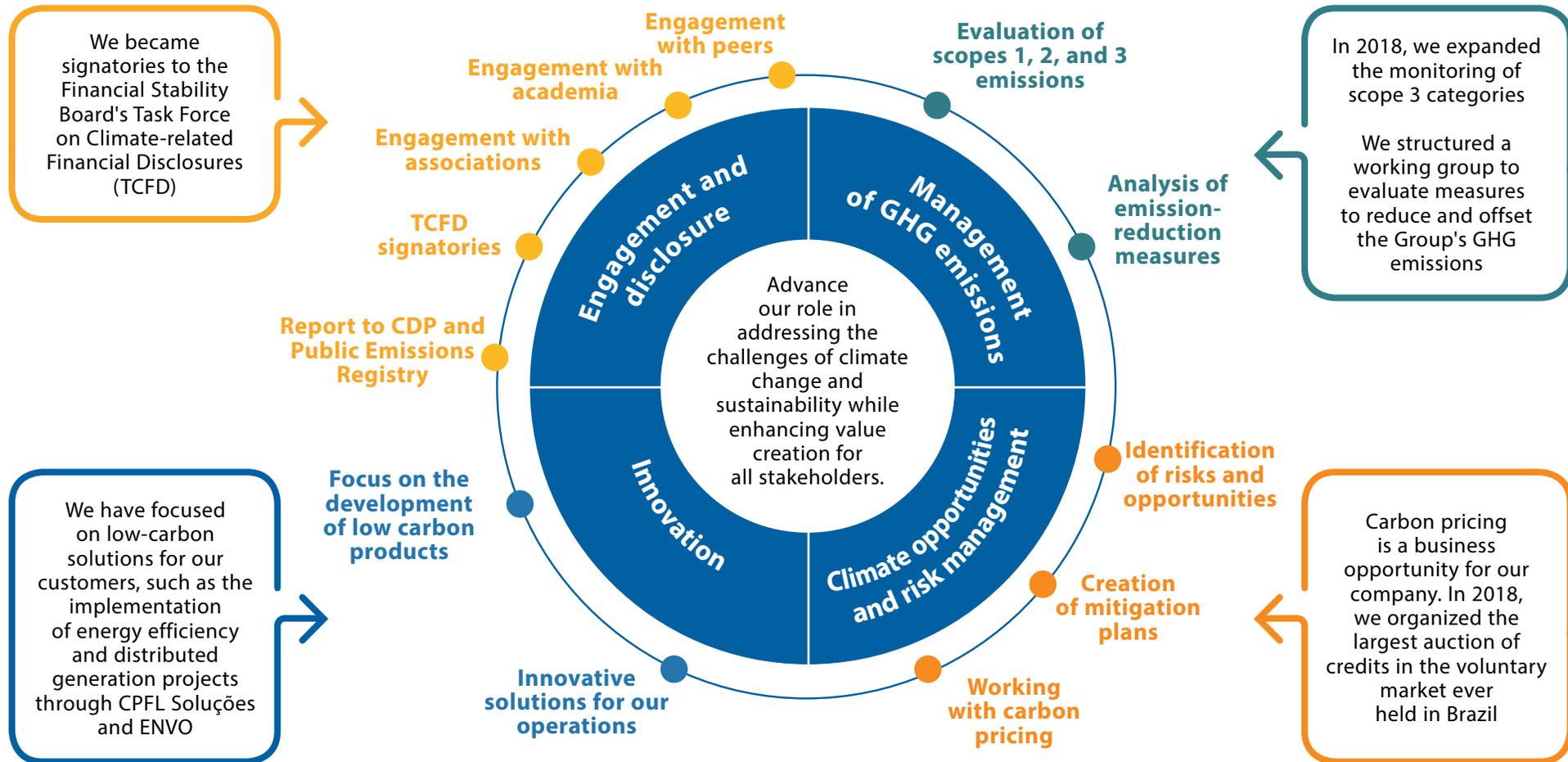


# CLIMATE CHANGE

We have incorporated the theme of climate change into our business strategy and the development of projects and new products. As part of that move we act on four main fronts, as shown in the diagram



## Action fronts on the issue of climate change



# Management of GHG emissions

Identifying the processes associated with GHG emissions is the first step in allowing us to plan our long-term performance and mitigate impacts related to this aspect. We started the development of our annual greenhouse gas inventory in 2007, and since 2011 we have participated in the Brazilian GHG Protocol Program, which establishes guidelines and internationally recognized parameters for the development of this type of mapping. Our inventories, available on the program's **Public Registry of Emissions**, are submitted for external verification, receiving the Gold Seal of the GHG Protocol.

Since 2017, we have presented our inventory in the Annual Report through the filter of shareholding structure, which allows us to proportionally account for the emissions of the generation assets in which we hold a stake. More than half of our emissions belong to scope 1, that is, they are directly related to the activities that take place at our units. In this category, 28% of emissions are derived from the operation of the Epasa thermoelectric plant, which is driven by the national needs of the energy matrix and is directly authorized by the National System Operator (ONS). In 2018, the increased participation of other sources in Brazilian power generation reduced the need to bring thermal plants online, contributing to the 39.5% reduction in scope 1 EPASA emissions. In absolute terms, we went from 759,900 tCO<sub>2</sub>e emitted in 2017 to 695,100 tCO<sub>2</sub>e in 2018.

In Scope 2, the main emission factor is the technical losses that occur during the distribution of energy, responsible for 99% of the total in this category. In 2018, we emitted 347,300 tCO<sub>2</sub>e in this scope, a decrease of 23% in relation to the previous period, mainly due to the reduction of the National Interconnected System (SIN) emission factor. We are an industry benchmark for this indicator, and we are working continuously to further improve this index.



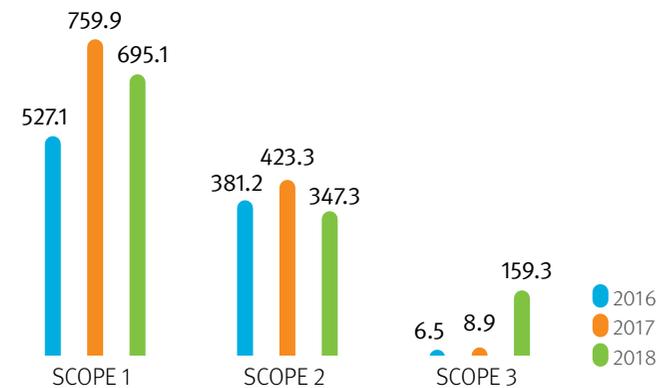
Biomass plant in Pirassununga (SP)

We have expanded the scope of inventoried sources and revised our view on emissions that occur outside the company's organizational boundaries for Scope 3, which monitors activities in our value chain. In 2018, we included the report on energy inputs from biomass and other primary energy sources and expanded reporting related to the transportation of purchased products and services. As a result, we saw a significant increase in this category, from 8,900 tCO<sub>2</sub>e to 159,000 tCO<sub>2</sub>e.

Using absolute data we also monitor the intensity of emissions. This measure allows us to manage our efficiency regardless of the expansion or contraction of our operations.

In 2018, we set up a working group that reports to the Sustainability Committee to evaluate emissions reduction and compensation measures, which has already resulted in the transition of electric vehicles from CPFL R&D projects to the conventional fleet, and made available to transport employees.

INVENTORY OF EMISSIONS (thousand tCO<sub>2</sub>e)



INTENSITY OF GREENHOUSE-GAS EMISSIONS FROM SCOPES 1 AND 2

	2016	2017 <sup>2</sup>	2018
By generated energy (tCO <sub>2</sub> e/GWh) <sup>1</sup>	73.7	135.8	95.1
By distributed energy (tCO <sub>2</sub> e/GWh)	14.1	18.0	15.4
By net operating revenue (tCO <sub>2</sub> e/R\$ million)	47.5	44.2	37.0

<sup>1</sup> Considering the equity stake in CPFL Renováveis.

<sup>2</sup> The emission intensity data for generated and distributed energy in 2017 were restated.

# Management of risks and climate opportunities

## Evaluation of risks and opportunities

Climate change is increasingly gaining relevance on the agenda of companies across all sectors of the economy. For the power sector, the potential impacts are clearly measurable along the chain, from the segment that generates energy all the way to the supply of our final customers.

Recognizing these impacts, our Mapping of Risk and Climate Opportunities identifies the main drivers and impacts associated with our business on this dimension, classifying them into three categories: changes in regulation, changes in physical parameters, and changes in other parameters.

In terms of risks, regulatory aspects are mainly linked to a potential scenario of carbon taxes and possible changes in legislation for renewable generation, which may lead to an increase in operating costs. As for the risks related to the physical climate parameters, we categorize this by segment and, for generation, we map the impact by energy source.

With regard to opportunities, the main focus of our monitoring is strengthening multilateral agreements such as the Paris Agreement, cap and trade systems, incentives and regulations that competitively distinguish energy from renewable sources, and regulations favorable to the sector in the field of renewable generation.

New consumption patterns, in turn, already represent alternatives for opening up markets and generating

## Influence of physical climate parameters



### Distribution and transmission

- Increased frequency of interruptions in power supply due to the increase in extreme weather events, such as storms, wind gusts, lightning, and vegetation falling on the power grid
- Increased energy demand for air conditioning (in summer) and irrigation

additional revenues for CPFL Energia, and may contribute to increasing demand for services in energy efficiency and distributed generation, such as CPFL Soluções and ENVO. We are also closely monitoring the theme of electric mobility (learn more on page 67), which should see demand grow in the coming years, generating new business opportunities.

Steps have been taken in various areas of the company's operations to monitor these risks and opportunities. In generation, we invest in dam safety and in the improvement of maintenance processes, such as the revision of Emergency Action Plans. In distribution, network automation initiatives (learn more on page 59) and solutions such as the Arborização + Segura ("Safer Tree Planting") project (learn more on page 76) stand out among the risk mitigation measures identified. For the coming year we also face the challenge of advancing issues related to the financial valuation of the risks and opportunities mapped.



### Generation

#### Hydroelectric

- Reduction in total and seasonal availability of water
- Increase in drought periods
- Increased evaporation at reservoirs
- Potential conflicts over water use



#### Thermoelectric

- Quantity and quality of cooling water
- Cooling and operating efficiency of turbines



#### Biomass

- Availability and distribution of land with adequate soil and climatic conditions (agricultural zoning)
- Desertification
- Changes in crop productivity



#### Solar

- Changes in hours of sunlight (cloud formation)
- Reduced energy-production efficiency due to reduced radiation or environmental conditions



#### Wind

- Changes in intensity, duration, direction, and speed of wind
- Damage to equipment due to extreme weather conditions

## Carbon pricing

We believe that carbon pricing is a growing trend, and being prepared for this new model can represent a competitive advantage for companies. Based on this premise, in 2018 we structured our low carbon portfolio and created a centralized portfolio-management structure for two major products: carbon credits and renewable energy seals.

In relation to carbon credits, we have 11 projects registered under Clean Development Mechanism (CDM) and 3 projects aligned with Verified Carbon Standard (VCS) in relation to water and wind generation projects.

In 2018, we organized the largest auction of carbon credits in the voluntary market (VCS) in Brazil, based on Baesa assets. Carried out on a web platform, four big players in the Brazilian, Swiss, Indian and

English markets participated. We are also submitting a Ceran project to the new UN Sales Platform, **Go Climate Neutral Now**. Altogether we have sold 661,300 carbon credits through auctions and bilateral deals.

In terms of renewable energy seals, CPFL Renováveis has two projects registered with the Renewable Energy Certificate System (RECs), a voluntary platform for trading renewable energy certificates that was created by I-REC Standard (international trade) and REC Brazil to encourage the development of renewable energy. In 2018, 20,000 certificates were sold, backed by the Eurus Wind Complex located in Rio Grande do Norte. Santa Luzia SHPP, installed in São Domingos (Santa Catarina state) is also registered, but has not traded certificates in the last year.

## Engagement and promotion

Click on each of the initiatives to learn how we are involved in these discussion groups on the theme of climate change

# RESPONSIBILITY FOR THE ENVIRONMENT



Environmental management of our businesses, in all segments in which we operate, seeks to ensure that all practices for the sustainable use of natural resources are implemented in accordance with our Environmental Policy and other commitments involved in the integrated management of environmental aspects, from quality and health to safety.

We have an ISO 14001-certified Environmental Management System which we use to ensure conformity in our operations and to provide greater efficiency and reliability to environmental licensing processes. We continually monitor risks, seeking to minimize impacts to the environment and promote business sustainability.

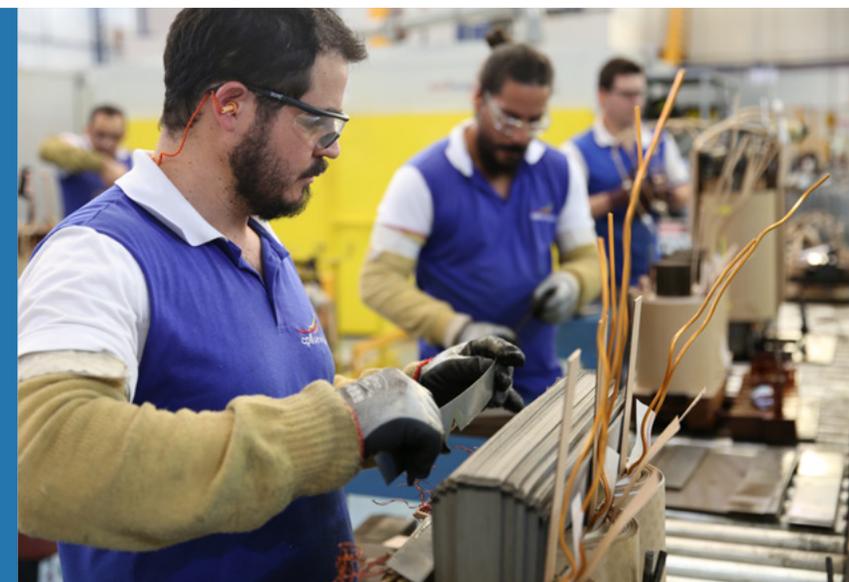
## Waste management

Waste management is structured in a specific program, which establishes classifications according to legal requirements and their proper allocation. Hazardous waste, which accounted for 97% of the total waste discarded in the year, corresponds to materials resulting from operation and maintenance of the electrical grid, most of which contain oil (cloths and rags, crushed stone, used insulating oil, and others).

Non-hazardous waste refers to Class II waste generated in operational activities, such as used but uncontaminated Personal Protective Equipment (PPE), which are delivered to specialized companies

### Equipment Refurbisher

The materials from the electrical grid that are sorted for recovery first pass through the CPFL Serviços equipment refurbishing facilities. Following investments of R\$ 6 million in 2017, this unit was adapted into a production-line layout, which ensured greater safety, productivity, and processing quality. The impact of the initiative went beyond the benefits to the business, generating 205 jobs filled by professionals from the region of São José do Rio Pardo (São Paulo state), where the unit is located. In 2018, about 8,900 equipments and 2,400 tons of scrap iron, aluminum, copper, plastic and other materials were recovered.



that collect and dispose of them in environmentally appropriate locations and in accordance with environmental agency regulations. Other wastes, specifically materials removed from the power grid, such as cables, poles, and insulators, are collected and reused through a reverse logistics process for reuse or sale of material to other companies. In 2018, 874.5 tons of waste were disposed of (excluding electrical grid materials), an increase of 52.8% in relation to the total volume in the previous year, mainly due to strategic works to expand the electric system and replacement of electrical grid equipment to improve services provided. Of this total, 52.9% were recovered.

#### WASTE BY DISPOSAL METHOD (T) \*



- 463.0 Energy recovery
- 284.0 Reuse
- 113.3 Incineration
- 28.9 Landfill\*
- 14.2 Recycling

\*Corresponds to non-hazardous waste. All other methods refer to hazardous waste generated in the year.

## Biodiversity

Managing the effects our activities have on fauna and flora takes place in accordance with the guidelines established in our Environmental Management System (EMS), certified according to ISO 14001. Thanks to the EMS, we have established processes for obtaining preliminary licenses for new generation, transmission, and distribution enterprises, including the identification and classification of their environmental impacts, as well as the definition of action plans to be adopted for mitigation or reversal.

The management model also seeks to enhance the environmental benefits linked to our business. Our work contributes, for example, to the preservation of habitats around hydroelectric power plants, the reconstitution of plant cover in urban centers, and other aspects. All impacts are assessed when preliminary licenses are obtained, through

environmental impact studies, and then classified according to their nature, duration, extension, and reversibility. Any effects that are considered irreversible are adequately compensated in accordance with the requirements established by the competent agencies.

### Generation

The most frequent negative impacts related to the generation of energy are the reduction of plant cover due to the installation of power lines, substations, and dams; changes in water, air, and soil quality; and changes in the availability of water. Environmental interference in the region surrounding the projects is more intense during the construction phase. All effects are transitory and duly monitored, mitigated, and compensated through the implementation of actions proposed during the environmental licensing process. At the current stage – that of operation – environmental interference aspects are minimized and controlled

to ensure the satisfactory environmental performance of projects, as well as legal compliance.

The HPPs controlled by CPFL Geração have 34,500 hectares of their own areas and more than 8,000 hectares of permanent preservation areas (PPA).

At Baesa and Enercan, the annual PPA Conservation Program engages neighbors in conservation and maintenance activities at these areas. Participants enrolled in the public tender issued by the companies are awarded cash when they adopt appropriate practices and do not interfere in the PPA ecosystem. Generators at the Ceran complex work in partnership with the Public Prosecutor's Office, local governments and NGOs in the surveillance and protection of these areas.



At the end of the year, CPFL Renováveis had 3,100 hectares of PPAs, 43,500 hectares of legal reserves (LR) and 12,500 hectares of third party LRs. One of the inherent risks of operations is birds and bats colliding with wind turbine blades in the wind farms. At these operations, the company maintains fauna monitoring programs that ensure the monitoring of species in the region and include, among other requirements, the accounting of occurrences of this type. As for hydroelectric generation assets, five SHPPs have a relevant impact on the fish population migrating through the rivers during their life cycle, especially the *piau-vermelho* (*Leporinus copelandii*), present at all five operations. To minimize this impact, there is a transposition system, carried out manually or by means of structures. In the first modality, a team of specialized biologists capture the animals, identify and catalog the individuals, and then return them to a point on the river on the other side of the dam. The structural model exists only at the Boa Vista 2 SHPP and involves a fish ladder built around the dam to allow the passage of migrating fish.

At the Foz do Chapecó HPP, ten animal species that are classified as endangered according to the International Union for Conservation of Nature (IUCN) list were identified in 2018. At the CPFL Renováveis units, 31 species on the IUCN list were mapped, two of them being threatened species, ten being vulnerable, eight near-threatened species, and 11 of little concern.

For more information on our power plants' environmental programs, consult their institutional websites.

## Transmission and distribution

One of the main impacts in these segments is associated with the construction of transmission and distribution lines, which in many cases requires plant suppression and can alter the local landscape, flora, and fauna. During this process we carefully carry out all legal requirements applicable to environmental licensing, minimizing impacts and compensating them properly. The path of power lines, for example, is defined with consideration for the smallest possible impact on forests and isolated trees. In stretches where it is not possible to change the location of the towers and wires, we raise the height of the structures to avoid interacting with the local vegetation.

One important initiative we have developed in the São Paulo state is the Preserva ("Preservation") Program, an agreement with CETESB that allows us to unify the terms of an environmental recovery commitment and to carry out the reconstitution of plant cover in places of ecological

interest. In this way, trees are planted in concentrated areas, enhancing the effect of habitat preservation and combating climate change. In addition, this enables a cost reduction of around R\$ 224,000 per year.

Also worth mentioning is the Integrated Manejo Integrado de Vegetação em Linhas de Transmissão ("Management of Vegetation along Transmission Lines" - MIVE). This solution permits the replacement of large trees that are incompatible with the transmission networks with shrub species that grow to smaller sizes and, at the same time, maintain the environmental quality of the areas where the assets are installed.

At the distribution companies, the reduction of plant cover in cities is inherent to pruning activities that contribute to ensuring the availability of energy supply and to the population's safety. To minimize this environmental impact, we carried out Arborização + Segura, a project to substitute trees and donate seedlings to restore green areas (learn more on the next page).



**The Preservation Program and the Integrated Management of Vegetation along Transmission Lines** are two relevant initiatives to **minimize the impact** of our assets on **biodiversity**



*Transmission towers in Campinas (SP)*

## Arborização + Segura ("Safer Tree Planting")

Planting and preserving trees are essential for the environmental quality of urban centers, providing benefits such as thermal balance and improved air quality. However, the interaction between trees and the power grid can be dangerous and is the main cause of interruptions to the power supply.

Since 2015, via agreements with municipalities we have carried out the Arborização + Segura project, which promotes the replacement of trees of inappropriate species and size by others with a growth profile more appropriate to coexistence with the distribution networks. In addition to increasing supply security, communities benefit from a greater number of trees planted in areas in the municipality strategically selected to avoid damage to equipment.

In 2018, the project was recognized by the United Nations (UN) as a success case for business operations aligned with the Sustainable Development Goals (SDG). Arborização + Segura was one of the projects by Brazilian organizations selected to be presented at the SDG in Brazil event – “The role of the private sector” - held in New York.

Present in 29 municipalities in the states of São Paulo, Rio Grande do Sul, and Paraná, Arborização + Segura has already led to the donation of more than 8,000 saplings - the goal is to reach 40,000. This number exceeds by almost six times the amount of trees that will be replaced to adapt urban vegetation.

In conjunction with improvements in network operation, such as preventive pruning and adoption of compact networks, this initiative led to a 17.6% reduction in energy supply interruptions resulting from trees in the cities of Itatiba and Amparo (São

Paulo state), where 280 trees were replaced. Each interruption of this type costs our company an estimated R\$ 400.

Other benefits of Arborização + Segura are the improvement in air quality and water balance, noise reduction, and lower risk of accidents involving the power grid. Aspects that directly influence the quality of life for people living in partner cities.

The Arborização + Segura project contributes to achieving SDG goals

**SDG**

More than **R\$ 480,000** invested since 2015

**29** municipalities covered

Close to **800** trees replaced

More than **8,000** saplings donated

**13** new partnerships in 2018



Sapling nursery of Arborização + Segura project

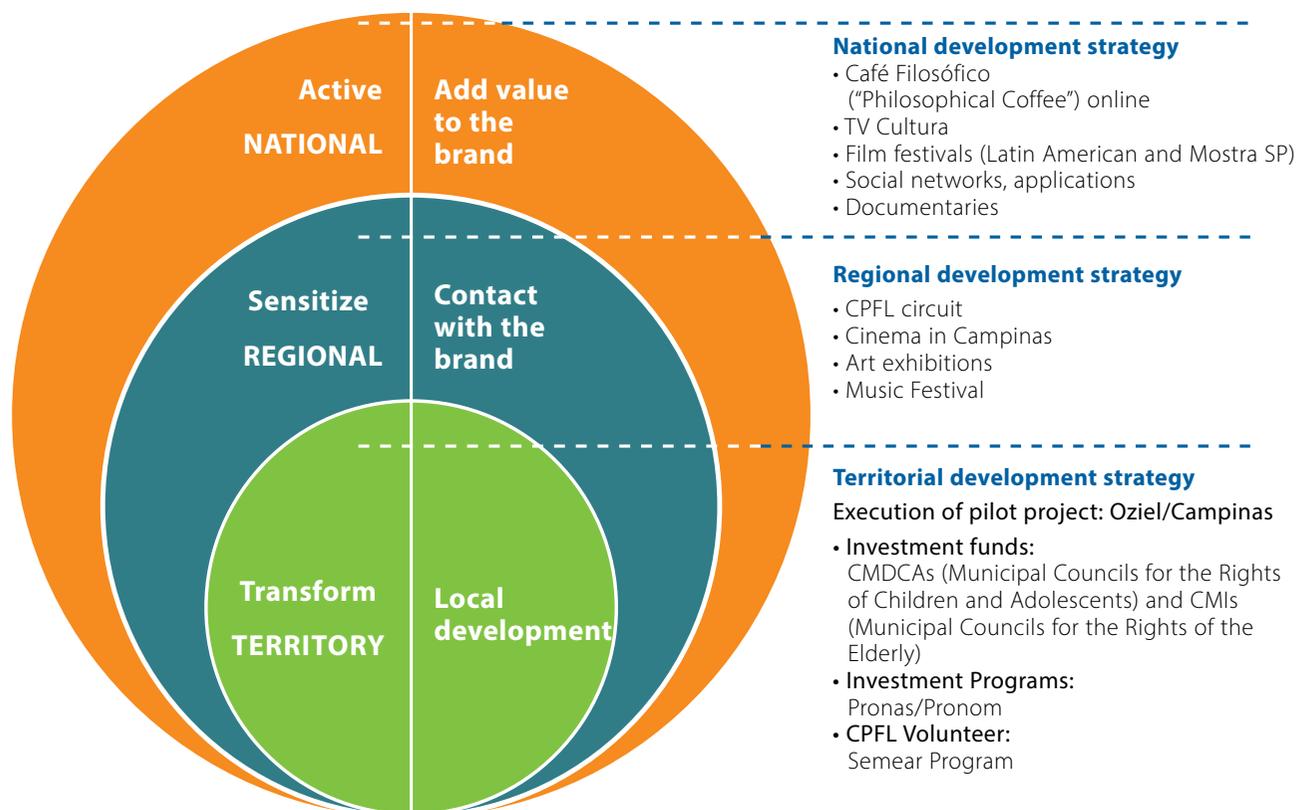
# VALUE TO SOCIETY

The private social investments that we make through the CPFL Institute and the business units, made possible from our own resources and thanks to incentive laws, expands the connection our company has with communities in the municipalities where we have operations. These actions are guided by the **Social Investment Policy** and reinforce our commitment to sustainability.

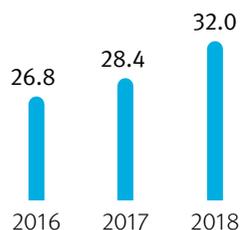
In 2018, the CPFL Institute celebrated 15 years of existence. Its purpose is to nationally activate the most varied relationship channels with different stakeholders, through connectivity and the diffusion of its programs, to sensitize stakeholders in cities included in CPFL Energia's areas of interest, impacting them through cultural and sports activities, and transforming the reality of the communities by contributing locally to empowering various social actors.

The CPFL Institute's strategy focuses on integrated investments that support cultural, sports, and social projects distributed among three major fronts: national, regional and territorial. Cultural activities guide debates, produce reflections, disseminate statements that reinforce diversity, and support collective life projects. Sports activities promote health and different possibilities for living in the public space. Social activities work collaboratively with municipal councils for the defense of rights (of children, adolescents, and the elderly), encourage volunteer work among our employees and empower communities where we are active and in territories of interest to take a lead in developing public policies.

## Fields of action of the CPFL Institute



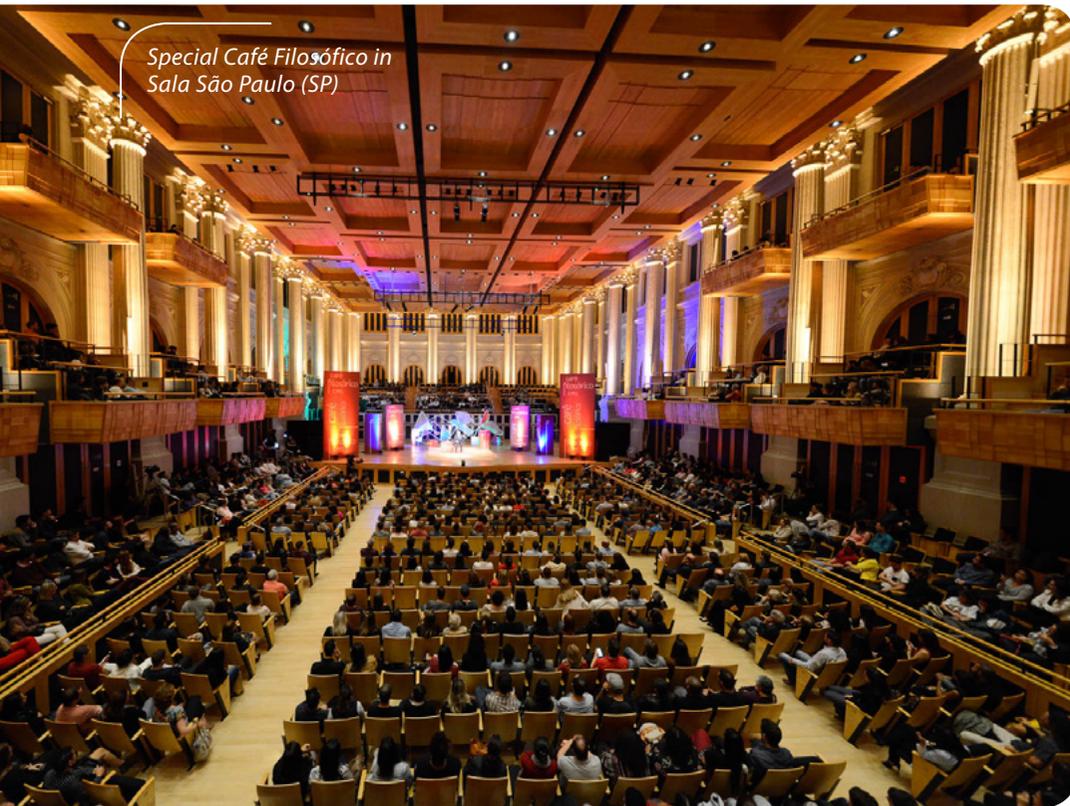
EVOLUTION OF PRIVATE SOCIAL INVESTMENT (R\$ MILLION)



In 2018, the CPFL Institute allocated approximately **R\$ 32 million** to initiatives that positively impact the community

## Main projects in the national sphere #difusão (#diffusion)

In this scope, we strengthened the CPFL brand through the activation of new networks with various stakeholders, mainly by sharing audiovisual content produced by the CPFL Institute. One of the mechanisms in this context is our presence on social networks like Facebook, Instagram, Twitter and LinkedIn, where the CPFL Institute has approximately 600,000 followers. In 2018, approximately R\$ 13.3 million were invested in this program, with special mention of the following projects:



Special Café Filosófico in Sala São Paulo (SP)

### Café Filosófico CPFL ("CPFL Philosophical Coffee")

A series of meetings on various contemporary themes, with the goal of discussing dilemmas in the current world. The meetings are recorded, broadcast live and made available on the internet. An edited version has been shown on TV Cultura since 2003.

#### Results in 2018:

- **32 recordings**
- **7,000** audience members
- **12 million** viewers (TV Cultura)
- **953,000 people** reached through online transmission

### Contemporary music

The only regular Brazilian series of free concerts dedicated to the music of our time, performed and recorded in Sala Umarama at CPFL Institute headquarters, available on our website and broadcast on Cultura FM radio in the São Paulo state.

#### Results in 2018:

- **Coproduction** of a music festival (5<sup>th</sup> Festival of Brazilian Contemporary Music)
- **9 concerts**
- About **900 people** directly impacted
- **54 weekly broadcasts** (Rádio Cultura FM)

### Cine CPFL and international film festivals

Touring presentation, at the headquarters of the CPFL Institute in Campinas, of programming for the São Paulo International Film Festival and the São Paulo Latin American Film Festival, as well as screening the Cinema e Reflexão ("Cinema and Reflection") show at Sala Umarama, with weekly programming and debate sessions with filmmakers.

#### Results in 2018:

- **96 exhibitions**
- **8** discussion **sessions**
- **2** international **festivals**
- About **2,300 people** directly impacted

### CPFL Institute Play

Application with CPFL Café Filosófico videos, documentaries, interviews with producers and film directors, concerts, and debates about music.

#### Results in 2018:

- **33 lives shows**
- **20 new audiovisual** productions
- Archive of close to **900 videos**

## Main projects in the regional sphere #circuitocpfl (#cpflcircuit)

Set of itinerant cultural and sports projects with a regional scope that seeks to create networks of relationships in the localities of interest to CPFL Energia, fomenting the mobilization of social actors, as well as access to culture and sports. In 2018, this program invested R\$ 7.6 million and directly impacted more than 42,000 people in 106 municipalities through seven projects, among which three stand out (learn more below).



### Running and Walking

Project to promote sports and health, with running, walking, and cycling tours of between 5km and 10km in urban centers.

#### Results in 2018:

- **11 municipalities** affected and **90** impacted indirectly across **3** states
- **12** business **consultants** at CPFL Energia and **14 public managers** engaged
- About **20,000 people** directly impacted

### Solar Cinema

A van with equipment that transforms into a mobile film and sustainability station. Uses solar power to show movies in locations that do not have movie theaters.

#### Results in 2018:

- **62 municipalities** in 5 states affected
- **21 workshops**
- **21 films** produced
- **More than 22,000 km** traveled
- **More than 17,000 people** directly impacted

### Musical Parklet

A square on wheels that occupies an area originally intended for parked cars, becoming a stage for musical performances. The unit is equipped with an innovative water collection system, solar energy generation, and incentives for sustainable transportation.

#### Results in 2018:

- **33 municipalities** affected
- **35 musical presentations**
- **Almost 3,000 km** traveled
- About **5,000 people** directly impacted



Film screening of  
Solar Cinema

## Main projects in the territorial sphere #cpflsocial (#socialcpfl)

In this context, one of the main objectives is to promote the sustainable development of communities through actions that contribute to the improvement of public policies and that stimulate inclusion, social agency, and collaborative work, preparing and legitimizing each individual to face social challenges. In 2018, investments in this sphere totaled R\$ 11.1 million on projects that impacted about 230,000 people, directly benefiting 44 municipalities and indirectly reaching another 84. See the highlights below.



### Semear Program

Seeking to share knowledge and engage volunteers in social causes, the project contributes to the development of communities through one-time or ongoing volunteer actions designed to improve quality of life, make spaces more creative and sustainable, and promote the inclusion and development of stakeholders through social organizations.

#### Results in 2018:

- **560** direct **volunteers participating**
- **600 hours** of volunteer training
- **21 activities** in **9** cities
- **3,300 people** impacted
- **2,183 hours** donated by the company (time spent planning activity during work hours)

### Development of Municipal Legal Councils

This includes councils focused on children, youths, and the elderly. In the first group, the program trains members of Municipal Councils for the Defense of the Rights of Children and Adolescents, promotes articulation among people working on this public policy and fosters collaborative work through training actions, social diagnosis development, and the implementation of action plans and projects that are capable of transforming realities and reducing rates of vulnerability, structured across three cycles. Within the scope of Municipal Councils for the Elderly, we work with the World Health Organization's (WHO) concept of active aging, focusing on promoting quality of life as people age through the Cidade para Todas as Idades ("City for All Ages") project. The initiative provides a diagnosis developed through a participatory process, the result of which is an action plan involving various city departments, to be implemented in five years by the municipalities.

#### Results in 2018:

##### Children and youths

- **21 municipalities** with monitoring of all 3 cycles
- **315** engaged **managers and technicians**
- **42** technical and institutional **events**
- **28 training** workshops, totaling 224 hours of training
- **About 280 Council representatives** from 92 municipalities trained

##### Elderly

- **2 municipalities** served (pilot project)
- **50,000 people** impacted by the implementation of the action plan



3 GOOD HEALTH AND WELL-BEING  
 4 QUALITY EDUCATION  
 10 REDUCED INEQUALITIES  
 11 SUSTAINABLE CITIES AND COMMUNITIES  
 17 PARTNERSHIPS FOR THE GOALS  
**SDG**

## Education

On this front, we highlight the online adaptive study platforms Geekie and Ludz Tamboro, as well as the community libraries. The Geekie project aims to enhance students' learning at municipal and state schools by facilitating the planning of pedagogical interventions that make it possible to remedy learning gaps, as well as to provide ongoing training for teachers and managers. The Ludz Tamboro platform, meanwhile, seeks to implement new teaching methodologies with a focus on mathematics and a game-based approach to teaching. Community libraries, in turn, support the creation and qualification of public policies to democratize access to literature and contribute to the effectiveness of Law 12,244/10, which requires all educational institutions in the country to have a library by 2020.

### Results in 2018:

#### Geekie

- **20,000 students** from **70 schools** involved in Caxias do Sul (RS)
- **190** instances of pedagogical feedback for **2,400** teachers
- **4,310 hours** of training

#### Ludz Tamboro

- **7,600 students** from **9 schools** involved in Santos (SP)
- **247 teachers** trained

#### Community libraries

- **4 libraries** inaugurated, with **5,355** books donated
- **440 hours** of training for **163** people in library management and reading promotion
- **About 4,000** impacted directly

## Health

The Tolife solution for hospitals and our support to Cancer Hospitals are the main investments the CPFL Institute made in this area. The first project involves the implantation of a system for clinical risk classification and organization of the flow of patients at Emergency Care Units (UPAs) of public hospitals or those that serve the Unified Health System (SUS), optimizing the processes of urgent and emergency care. Meanwhile, through the National Program of Support for Oncological Care (Pronon), support for Cancer Hospitals seeks to strengthen centers for diagnosis and clinical treatment through the acquisition and renovation of equipment for the care of cancer patients.

### Results in 2018:

#### Tolife

- **5 units** in **3 cities**, totaling **62,000** attendance/month
- **611,000 lives/year** impacted directly and indirectly
- **Reduction of average risk-rating time** from **8** minutes to **2** minutes

#### Cancer Hospitals

- **5 hospitals** supported in Barretos (SP), Piracicaba (SP), Fortaleza (CE) and Natal (RN)

## Local development of generation units

In addition to the activities of the CPFL Institute, we carry out different projects with the communities close to our power generation units. One of the most renowned is the Raízes Program, led by CPFL Renováveis. The initiative provides social mobilization, planning and implementation of projects and participatory management of communities through the selection of projects via the Company's Sustainability Committee, which allows us to add a strategic business vision to the developed projects, promoting even more significant results for communities - in alignment with CPFL Renováveis principles of value creation and sustainability in its processes. In 2018, we operationalized 23 projects along the three pillars of the Raízes Program: Water Security, Commitment to Future Generations, and Productive Chains.

In 2018, Foz do Chapecó Energia invested R\$ 3.5 million in the 14 municipalities covered by the plant, using tax incentive laws. The resources were applied at 29 projects involving culture, sports, and education. Among the supported initiatives were projects that provided the population with cinema, classical music, and dance performances at Christmas celebrations and city anniversary celebrations. The unit also held a workshop to train municipal agents in developing projects within the guidelines of tax-incentive laws, facilitating access to resources for future initiatives.



Raízes Program



CPFL Renováveis' **Raízes Program** enabled **23 projects** across three thematic lines to take place during the course of 2018



Environmental project Viva o Taquari-Antas Vivo (RS)



The Baesa, Enercan and Ceran plants have an External Social Investment and Sustainability Policy that was approved and disclosed internally and externally, and which guides actions in the communities. The projects are enrolled in an online platform permanently available for fundraising projects. In 2018, 208 projects were enrolled, of which 97 were selected to receive support from the projects. Investments totaled R\$ 26.9 million, of which R\$ 6.3 million came from Baesa, Enercan and Ceran through incentive funds and also from their own budget. The supported projects demonstrate our support for local and regional partnerships and include the promotion of music, theater and culture, the promotion of sports, and the strengthening of health and educational development, especially in Elementary and Middle Schools. At Baesa, we also highlight the maintenance of two Community Councils, which discuss topics of interest to the community and to the enterprise, serving as a direct channel between the company and its stakeholders.

At Epasa, the most significant partnership is with the Community Educational Training Center (CEFEC), which provides more than 500 children and young people in situations of social vulnerability with vocational courses and pedagogical workshops. The power plant provides institutional support for the entity at local events, such as the Rota do Sol Moto Fest 2018, and through employee engagement campaigns.

## Evaluation of socio-environmental impacts of new projects

In 2018, CPFL Renováveis initiated the Study of the Quilombola (traditional communities formed by descendants of runaway slaves) Component for the Esplanada Wind Complex, a project under development that will be part of the licensing process for the unit. During the year, a number of actions were carried out in the context of implementing the Boa Vista 2 SHPP, with an emphasis on the Social Communication Program, providing correct information and transparency to the public, and the Environmental Education Program, which provided greater awareness to the community and workers regarding aspects of the local territory.



Social investments by generation enterprises strengthen **social mobilization** in the localities and makes **educational, cultural, sports, and health** projects possible

# Training in communities

Through CPFL University, we offer free qualified training programs to local populations. Organized in partnership with technical institutions, these schools contribute to the availability of skilled labor for the sector and generate positive impacts in our areas of activity. In 2018, in addition to continued investment in the School of Electricians and the School of Electric System Pruners, we created the School of Designers.



Electricians training center in Caxias do Sul (RS)

## Main highlights of the Technical Training Schools in the communities

### School of Electricians

Organized in partnership with SENAI, it offers the community free training in the tasks of a distribution electrician.

- **Classes:** 10 in São Paulo and 4 in Rio Grande do Sul
- **Participants:** 250 graduates and 141 in training
- **Hired:** 190 professionals

### School of Electrical System Pruners

Trains people from the community in technical and safety skills to perform the proper management of vegetation around the power grid.

- **Classes:** 2 in Rio Grande do Sul
- **Participants:** 34 graduates
- **Hired:** 25 professionals

### School of Designers

Started in 2018 in partnership with FAT/ ETEC, the school trains technicians to analyze and develop electrical distribution network projects according to CPFL standards and procedures.

- **Classes:** first groups in 2018
- **Participants:** 27 trainees
- **Hired:** there will be 16

# FINANCIAL PERFORMANCE

The financial results achieved in 2018 confirm the assertiveness of our strategy and the effectiveness of the actions conducted by CPFL Energia. Our net operating revenue was 5.2% higher than in 2017, reaching R\$ 28.1 billion. Ebitda, which measures operating cash flow, advanced 15.9% to R\$ 5.6 billion, and net income totaled R\$ 2.2 billion, up 74.2% from the previous year. We also invested R\$ 2.1 billion in the period.

CPFL ENERGIA INCOME STATEMENT OVERVIEW (R\$ MILLION)				
	2016	2017	2018	Var. (%)
Gross operating revenue	30,785	40,053	42,626	6.4%
Net operating revenue	19,112	26,745	28,137	5.2%
Cost of electricity	(11,200)	(16,902)	(17,838)	5.5%
Operating costs and expenses	(5,389)	(6,822)	(6,590)	-3.4%
Result of service	2,523	3,022	3,708	22.7%
Ebitda	4,126	4,864	5,637	15.9%
Financial result	(1,453)	(1,488)	(1,103)	-25.9%
Profit before tax	1,381	1,847	2,940	59.2%
Net profit	879	1,243	2,166	74.2%

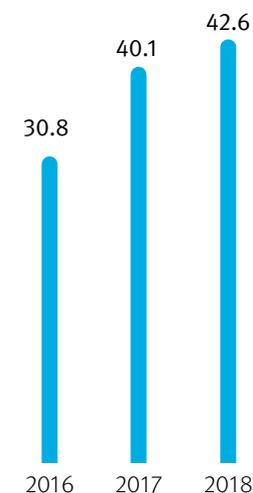
## Operating revenue

Our gross operating revenue totaled R\$ 42,626 million in 2018, an increase of 6.4% over the previous year, mainly due to:

- Increase of **12.9% (R\$ 3,324 million)** for supply of electric energy to final consumers;
- Increase of **19.7% (R\$ 796 million)** in other operating revenue;
- Increase of **68.8% (R\$ 141 million)** in updated financial assets of the concession;
- Decrease of **11.3% (R\$ 694 million)** in supply of electric energy to other industry agents;
- Decrease of **36.5% (R\$ 693 million)** in sectoral financial assets/liabilities; and
- Decrease of **14.5% (R\$ 301 million)** in revenue from construction related to concession infrastructure.

Of total gross operating income, some R\$ 14,490 million was deducted. Net operating revenue for the period was R\$ 28,137 million, an increase of 5.2% (R\$ 1,392 million) from the previous year.

GROSS OPERATING REVENUE (R\$ BILLION)



We achieved record results in 2018, with **5% growth** in net operating revenue, **16%** in Ebitda, and **74%** in profit



## Cost of electricity

During the reporting period, our cost of purchasing energy for resale decreased 1.0% (or R\$ 151 million) and reached R\$ 15,466 million. This is due to the following factors:

- Reduction of **3.9% (R\$ 566 million)** in the cost of energy acquired through regulated-market auctions, bilateral contracts, and short-term energy, due to the **reduction of 5.5% (3,592 GWh)** in the amount of energy purchased, partially offset by a 1.7% increase in the average purchase price (R\$ 227.30/MWh in 2018 vs. R\$ 223.45/MWh in 2017);
- Partially offset by:
  - increase of **13.5% (R\$ 317 million)** in the cost of energy from Itaipu, due to a 20.3% increase in the average purchase price (R\$ 240.03/MWh in 2018 vs. R\$ 199.58/MWh in 2017), partially offset by a 5.6% (662 GWh) reduction in the amount of energy purchased;
  - reduction of **3.8% (R\$ 60 million)** in PIS/Cofins tax credits (reducer of costs), generated from the purchase of energy; and
  - increase of **12.8% (R\$ 37 million)** in the cost of PROINFA, due to a 15.9% increase in the average purchase price (R\$ 297.52/MWh in 2018 vs. R\$ 256.69/MWh in 2017), partially offset by the reduction of 2.7% (31 GWh) in the amount of energy purchased.

The charges for the use of our Transmission and Distribution system increased 84.7% (or R\$ 1,088 million), ending the year at R\$ 2,372 million. This difference is mainly due to:

- Increase of **37.2% (R\$ 573 million)** in basic network charges;
- Reduction of **76.6% (R\$ 347 million)** in System Service Usage Charges (ESS) – a cost reducer – from revenue of R\$ 453 million in 2017 to revenue of R\$ 106 million in 2018;
- Expenses of **R\$ 135 million** in 2018 related to the Reserve Energy Charges - EER;
- Increases of **66.5% (R\$ 106 million)** in Itaipu transmission charges, 32.9% (R\$ 40 million) in connection charges, and 23.7% (R\$ 9 million) in charges for use of the distribution system;
- Partially offset by:
  - increase of **97.6% (R\$ 123 million)** in PIS/Cofins tax credits (reducer of costs), generated from the charges.

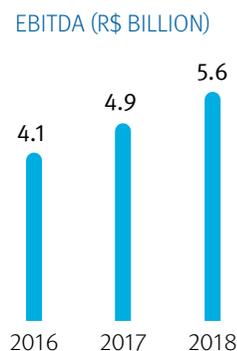
## Operating costs and expenses

In 2018, our operating costs and expenses were R\$ 6,590 million, a decrease of 3.4% (or R\$ 232 million) compared to 2017, mainly due to the following events:

- Decrease of **14.5% (or R\$ 300 million)** in expenses related to the construction of concession infrastructure as a result of investments in improvement and expansion of the Distribution and Transmission system;
- Decrease of **4.9% (or R\$ 35 million)** in expenses related to third-party services;
- Decrease of **21.1% (or R\$ 24 million)** in expenses of a private pension entity;
- Partially offset by:
  - increase of **4.3% (or R\$ 65 million)** in depreciation and amortization costs;
  - increase of **2.7% (or R\$ 37 million)** in our personnel expenses, reflecting the increase in costs from our collective bargaining agreements;
  - increase of **9.1% (or R\$ 14 million)** in the provision for doubtful accounts; and
  - Increase of **3.2% (or R\$ 8 million)** in material costs.

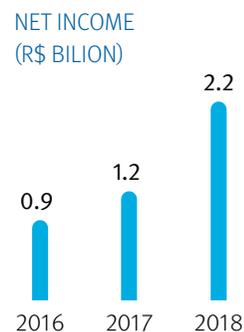
## Ebitda

Our operating cash flow, measured by Ebitda (earnings before interest, taxes, depreciation and amortization), reached R\$ 5,637 million, an increase of 15.9% in the year-over-year comparison. Ebitda was impacted by a 5.2% (R\$ 1,392 million) increase in net operating revenue, due to a 5.6% (R\$ 297 million) reduction in operating costs and expenses, including expenses with private pensions and costs of concession infrastructure construction, and an increase of 7.0% (R\$ 22 million) in equity pickup. These effects were partially offset by an increase of 5.5% (R\$ 937 million) in electricity costs and charges.



## Net income

Our net income totaled R\$ 2,166 million, an increase of 74.2% compared with 2017, reflecting the 15.9% (R\$ 773 million) increase in Ebitda and the reduction of 25.9% (R\$ 385 million) in net financial expenses. These effects were partially offset by increases of R\$ 170 million in Income and Social Contribution Taxes and 4.3% (R\$ 65 million) in depreciation and amortization.



## Debt

At the end of the period, our gross financial debt (including derivatives) reached R\$ 19,752 million, an increase of 0.7%. Cash and cash equivalents totaled R\$ 1,891 million, a decrease of 41.8%. As a result, our net financial debt amounted to R\$ 17,860 million, an increase of 9.1%.



## Distribution of dividends

In accordance with our bylaws, we distributed a minimum of 25% of our adjusted net income as dividends to our shareholders. Following this assumption, in 2018 we will distribute R\$ 489 million in dividends to the holders of our common shares, which corresponds to R\$ 0.480182232 per share.

## Distribution of added value (DVA)

The total added value to be distributed reached R\$ 18,962 billion, of which 71% was directed to taxes, charges and contributions. This amount is 9.5% higher than the value added distributed in the previous year.

DISTRIBUTION OF ADDED VALUE (R\$ BILLION)



7.3 %	Employees and benefits
70.9 %	Taxes, charges and contributions
10.3 %	Remuneration of external capital
11.4 %	Remuneration of own capital

## VALUE ADDED STATEMENT (R\$ MILLION)

	2016	2017	2018
Revenue	31,665	40,688	42,760
Inputs acquired from third parties	(16,150)	(23,120)	(23,379)
Gross added value	15,514	17,568	19,381
Retentions	(1,294)	(1,534)	(1,602)
Added value received by transfer	1,610	1,279	1,183
Net added value to be distributed	15,830	17,314	18,962
Employees and benefits	1,073	1,397	1,391
Taxes, charges and contributions	11,066	12,182	13,453
Remuneration of external capital	2,812	2,491	1,952
Remuneration of own capital	879	1,243	2,166



# ABOUT OUR REPORT

06.



# ABOUT OUR REPORT

The purpose of the Annual Report is to communicate to all stakeholders with whom we interact, our business model, how we generate value through integrated operations management, and the socio-environmental risks and opportunities that exist in the power sector. Its publication strengthens transparency in relationships we build with shareholders, internal audiences, suppliers, industry associations, customers and communities.

The document follows the standards of the Global Reporting Initiative (GRI), prioritizing performance indicators that relate to the matrix of topics most relevant to sustainability management at the company. It also considers the guidelines of the Integrated Report, a platform that seeks to guide organizations to report value generation with a broader view, taking into account six different types of capital: financial, manufactured, natural, human, intellectual, and social and relationship.

The data we present refer to the period between January 1 and December 31, 2018, and include companies operating in the segments of generation, transmission, distribution, and energy solutions. Through this scope, we highlight the importance of applying governance, management policies and tools, and standardized processes to increase innovation, efficiency, productivity and sustainability to verticalized performance in the power sector. Any restatements are indicated for each indicator, if they occur.

We receive comments and suggestions about this publication by email. All interested parties can send messages to [sustentabilidade@cpfl.com.br](mailto:sustentabilidade@cpfl.com.br).

## Materiality Matrix

In order to meet the demands of our stakeholders, we periodically conduct a process of reviewing the materiality matrix used both to guide the preparation of the content of this publication and to improve our strategy and sustainability management.

The last cycle of this process was carried out in 2018 with the USP of Ribeirão Preto College of Economics, Administration and Accounting of (FEA-RP/USP). Divided into two complementary phases, more than 500 participants contributed to this process.



In line with GRI Standards and the integrated reporting framework, our Annual Report **covers material issues identified** thanks to the broad and constant engagement of our stakeholders

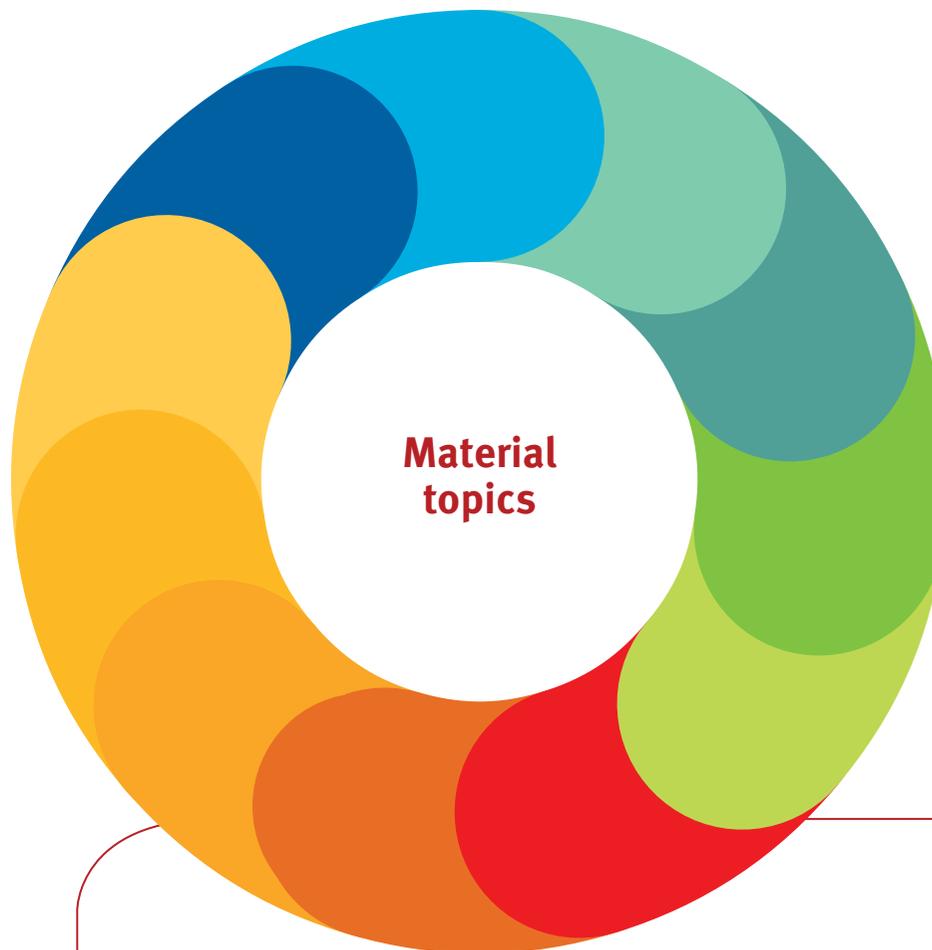
The first phase consisted of six focus groups, with key stakeholders – leaders, employees, suppliers, customers and the community - and interviews with presidents of important associations in the power sector. The scripts for conducting the dialogues considered prior reviews of company materials such as reports, policies, and the Sustainability Platform. In order to stimulate everyone's spontaneous and transparent participation regarding the perception of sustainable management value at CPFL Energia, USP conducted the activities, ensuring the impartiality of results. The second phase includes an online survey based on the results of the previous phase, in order to further probe the views that were raised.

The result of this process was the source of the materiality matrix for this Annual Report, presented below. Within the context of these 11 themes, we communicated to our stakeholders how we have conducted our business, invested in innovation, new technologies and sustainable practices, trained our personnel, and prepared the company for the ongoing transformation of the power sector.

### Our material topics



Click to know the main subjects covered in our Annual Report and the Sustainable Development Goals (SDG) to which are related



# SUPPLEMENT TO GRI DISCLOSURES

**102-3** | The headquarters of CPFL Energia is located on Engenheiro Miguel Noel Nascentes Burnier Highway, km 2.5, in Campinas (São Paulo state).

**102-8** | Information related to staffing was compiled from SAP reports into pivot tables to identify the targets requested by the GRI indicator. There were no significant changes in the year, nor a seasonal change in the labor force. We relied on the work of more than 8,000 outsourced workers, especially in the activities of network maintenance, facilities and inventory logistics.

**102-9** | The category of suppliers considered strategic and critical for the company were structured based on the Supply Base Management (SBM) management tool, a platform for evaluating companies with regard to financial aspects, safety, technical performance, documentary and legal compliance, and ethics. In addition to this, we also carry out analyses based on the categorization process (see more on page 57), in which we consider the possible exposure to supply risks and impacts on the company's results, currently leading to 18 categories in the scope of materials, such as: cables, transformers, poles, capacitors, and others; and

12 categories in the scope of services, such as: standardized technical services, network services, facilities, inventory and freight logistics, information technology, and others. The classifications of the categories of materials and services are not definitive because they are part of a dynamic process that involves issues of company and market strategy.

**102-11** | We have an Environmental Policy whose principles are respect for the environment, pollution prevention, and the promotion of continuous improvement of our activities' environmental performance. We also have an Environmental Management System certified according to the ISO 14001 standard, whose premise is the protection of the environment. Therefore, we adopt the Precautionary Principle in all our activities. For example, in environmental licensing processes, alternatives to the implementation of the project are always analyzed, evaluating environmental risks and impacts such as suppression of vegetation, and acting to minimize and mitigate them as much as possible.

**102-12** | We are signatories to the following commitments:

- Global Compact (United Nations - UN)
- CEO Guide to the SDGs (Sustainable Development Goals) (World Business Council for Sustainable Development - WBCSD)
- Brazilian Business Commitment to Water Security (Brazilian Business Council for Sustainable Development - CEBDS)
- Open Letter on Carbon Pricing (Business Initiative on Climate - IEC)
- Task Force on Climate-related Financial Disclosures - TCFD (Financial Stability Board - FSB)
- RGE, UNICEF, and You Initiative - Friends of the Child (United Nations Children's Fund - UNICEF)

**102-13** | Our participation in associations and entities strengthens our capacity to generate value within the institutional framework and in the context of sustainability.

**Associação Brasileira de Distribuidores de Energia Elétrica (Brazilian Association of Electricity Distributors - Abradee)**

Participation in the Board and in several working groups, among them: PCBs Working Group, Supplementing GRI indicators that discuss aspects related to the subject that are relevant to electricity distributors; and the Working Group on Legislative Accompaniment, which accompanies the main proposals at the National Congress.

**Associação Brasileira dos Produtores Independentes de Energia Elétrica (Brazilian Association of Independent Power Producers - Apine)**

We are active on the Board and in the Environmental Working Group. The institution articulates discussions about the energy generation market.

**Associação Brasileira da Infraestrutura e Indústrias de Base (Brazilian Association of Infrastructure and Basic Industries - Abdib)**

We are involved in the Board of Directors and the Advisory Board. Abdib brings together organizations to discuss infrastructure and sustainability aspects.

**Acende Brasil Institute**

We are members of the entity's Board of Directors, which supports studies about the entire value chain of the Brazilian power sector, providing wide-ranging access to research data and the publication of institutional positions.

**Federação das Indústrias do Estado de São Paulo (Federation of Industries of the State of São Paulo - Fiesp)**

One of our executives occupies the position of Infrastructure Advisor at the organization, which is the most representative of the sector. Our presence enables close contact with the market in order to understand our customers' needs.

**Associação Brasileira dos Comercializadores de Energia (Brazilian Association of Energy Traders - Abraceel)**

We accompany discussions at the entity, which seeks to bolster the sustainable opening up of the free market, and other regulatory aspects related to the commercialization of energy.

**Associação Brasileira de Energia Solar Fotovoltaica (Brazilian Photovoltaic Solar Energy Association - ABSolar)**

We are active in the Environmental Working Group, which aims to improve the discussion of these aspects in relation to the solar generation segment.

**Global Compact**

We are part of the Board and of the Brazilian Committee of the Global Compact, as well as being involved in the Energy and Climate and SDG Working Groups of the Brazilian Network of the Global Compact. The organization is a global benchmark in promoting sustainable development, under the coordination of the United Nations (UN).

**Conselho Empresarial Brasileiro para o Desenvolvimento Sustentável (Brazilian Business Council for Sustainable Development - CEBDS)**

We participate in the Thematic Climate Chamber, which promotes the exchange of knowledge and business experiences in climate responsibility.

**World Business Council for Sustainable Development (WBCSD)**

Through the Climate and Energy Group, we discuss issues related to these topics with representatives across the entire value chain.

**Centro de Estudos em Sustentabilidade da Fundação Getúlio Vargas (Getúlio Vargas Foundation Center for Sustainability Studies - GVCes)**

We are members of the Business for Climate Platform (EPC), the Emissions Trading System (SCE) and the Brazilian GHG Protocol Program, which includes the provision of our inventory of greenhouse gases in the Public Registry of Emissions.

**Iniciativa Empresarial pelo Clima (Business Initiatives on Climate - IEC)**

We accompany the discussions on behalf of a low carbon economy promoted by the IEC. The initiative is coordinated by five entities: CEBDS, Ethos Institute, CDP, GVCes and the Brazilian Network of the Global Compact.

**102-17 and 406-1** | The reports received on the External Ethics Channel are reviewed by a specialized team of lawyers and psychologists. The investigations, conducted by the Reports Processing Commission (CPD), are monitored by the Audit, Risk and Compliance Department, which is subordinated to the Board of Directors. In 2018, the External Ethics Channel received one complaint of gender discrimination, considered by the Ethics and Business Conduct Committee to be unfounded. We are committed to promoting an environment that is free of prejudice, discrimination and harassment. The site and the contact for the External Ethics Channel are available at this [link](#).

**102-22** | The Board of Directors has advisors from different cultures (Chinese and Brazilian) and the Human Resources Management Committee has carried out discussions aimed at increasing the participation of people of different genders and ages in leadership positions at the company.

**102-35 and 102-36 |** With regard to governance, the independent members of the Board of Directors and the members of the Fiscal Council receive fixed monthly payments, established according to market parameters. There is no remuneration for the other members of the Board of Directors, nor any additional remuneration for the members of the advisory committees. The executives that make up the Statutory Board receive fixed monthly remuneration, benefits and short- and long-term incentives. Benefits, such as medical and dental care, life insurance, food stamps, private pensions, etc., are in line with market practices. We also provide payments according to mandate terms. Short-term incentives aim to direct executives to fulfill the business strategy, while the long-term incentives are aimed at creating a vision and commitment, aligning interests to create sustainable value. The remuneration of these groups is defined at the General Shareholders' Meeting, after market research with specialized consultancies and prior evaluation by the Human Resources Management Committee. For the staff, salary studies also provide significant inputs by way of an internal process at the Human Resources Management and Performance Board.

**102-41 |** Taking into account the companies fully controlled by CPFL Energia, 100% of the employees are covered by accords or collective bargaining agreements.

**102-54 |** This report has been prepared in accordance with the GRI Standards: Core option.

**201-3 |** We provide 13 pension plans, seven in the Defined Benefit (BD) and Variable Contribution (CV) and six in the PGBL and Defined Contribution (CD) modality, administered by open financial entities (insurers) and closed financial entities (multi-sponsored entities). The contribution rates of employees and the respective counterparts of CPFL Energia vary according to each established plan. Membership among employees is high, representing almost 100% of in-house staff.

**205-3 |** There was no case of corruption related to CPFL Energia's operations reported during the year.

**304-1 |** This indicator is reported only for generation assets. Transmission and distribution lines are designed, implemented and operated in a way that minimizes socio-environmental impacts. Care begins during the elaboration of the project, when routes and construction techniques are defined that avoid or minimize interference with areas of permanent preservation (PPA) or the suppression of vegetation, making this impact insignificant. In the implementation and operation phases, if there is a need for interventions, we follow the conditions imposed by authorizations for suppression of vegetation issued by the competent environmental agencies, which enables the management of vegetation under the lines, even when in an PPA, thus guaranteeing the security in the supply of energy and the reduction in the risk of accidents, including forest fires by atmospheric discharge. The transmission and distribution lines are deployed in third-party areas, and administrative easements are established so that the Permanent Preservation Areas or Legal Reserve Areas do not belong to CPFL.

**305-1, 305-2 and 305-3 |**

<b>SUMMARY OF GHG EMISSIONS (THOUSAND tCO<sub>2</sub>e)</b>			
	<b>2016</b>	<b>2017</b>	<b>2018</b>
<b>Emissions by scope (thousand tCO<sub>2</sub>e)</b>			
Scope 1	527.1	759.9	695.1
Scope 2	381.2	423.3	347.3
Scope 3	6.5	8.9	159.3
<b>Biogenic emissions and removals related to scope 1 (thousand tCO<sub>2</sub>e)</b>			
Emissions	337.9	2,770.5	2,801.9
Removals	300.0	32.2	63.9

**306-1 |** The disposal of effluents is only significant in energy generation activities, specifically at Espasa, which operates a thermoelectric plant. The treatment of effluents comply with all applicable legal requirements and totaled 25,500 cubic meters in 2018, a reduction of 10.5% in relation to 28,100 cubic meters discarded in 2017, due to small variations in the process. The sludge generated in treatment was sent for disposal by specialized companies and duly registered with environmental agencies. The activities of distribution and transmission of energy do not generate significant water disposal, since this corresponds only to administrative activities.

**306-3 |** No significant leaks were recorded in the year.

**307-1 |** In 2018 there were no significant environmental sanctions.

### 306-2 and 306-4 |

#### WASTE BY TYPE AND DISPOSAL METHOD (t)

	2016	2017	2018
<b>Non-hazardous waste</b>			
Landfill	6.0	58.6	28.9
Recycling	0.0	0.0	0.0
Other	0.0	0.0	0.0
<b>Total</b>	<b>6.0</b>	<b>58.6</b>	<b>28.9</b>
<b>Hazardous waste<sup>1</sup></b>			
Reuse	373.0	290.1	284.0
Recycling	10.0	12.8	14.2
Recovery	106.0	254.1	463.0
Incineration	20.0	15.3	113.3
<b>Total</b>	<b>509.0</b>	<b>572.3</b>	<b>874.5</b>

<sup>1</sup>All hazardous waste was transported by specialized companies contracted by CPFL Energia, which have the applicable licenses and authorizations. There was no international transportation of waste.

**401-1 |** Despite the reorganization of our organizational structure last year, our turnover rate, based on the company's headcount as of December 31, 2018, remained stable in relation to the previous year.

#### HIRES

	2017		2018	
	Number	Rate <sup>1</sup>	Number	Rate <sup>1</sup>
<b>By gender</b>				
Men	1,801	17%	1,536	15%
Women	466	19%	644	25%
<b>By age group</b>				
Up to 30 years old	1,134	28%	1,196	32%
Between 30 and 50 years	1,073	14%	936	12%
Over 50 years old	60	5%	48	4%
<b>By region</b>				
Southeast	nd	nd	1,853	20%
South	nd	nd	327	9%
<b>Total</b>	<b>2,267</b>	<b>18%</b>	<b>2,180</b>	<b>17%</b>

<sup>1</sup>Rate calculated by the number of hires in each category relative to the headcount of the respective category on 12/31.

#### DISMISSALS

	2017		2018	
	Number	Turnover rate <sup>1</sup>	Number	Turnover rate <sup>1</sup>
<b>By gender</b>				
Men	1,632	16%	1,465	14%
Women	588	24%	565	22%
<b>By age group</b>				
Up to 30 years old	916	23%	786	21%
Between 30 and 50 years	980	13%	1,011	13%
Over 50 years old	324	26%	233	18%
<b>By region</b>				
Southeast	nd	nd	1,506	16%
South	nd	nd	524	14%
<b>Total</b>	<b>2,220</b>	<b>17%</b>	<b>2,030</b>	<b>16%</b>

<sup>1</sup>Rate calculated by the number of hires and dismissals / 2 for each category relative to the headcount of the respective category on 12/31.

**401-2 |** When temporary hiring is required, it is carried out by a third-party company, and thus adheres to the benefits policy of said companies. In the event of any direct hire for a specified period, the same benefits will be granted as are provided for in a contract for an indeterminate period.

**403-3 |** We did not identify a high risk or incidence of occupational illnesses in our operations. Our indicators are calculated with data for our own staff and also for third parties, such as frequency and severity rates.

**403-4 |** All collective agreements signed by our units include topics related to health and safety, such as activities by CIPAs (Internal Accident Prevention Committees), issues related to occupational health, safety inspection activities at contractor sites, and work-accident reporting procedures.

**403-2 |**

<b>NUMBER OF ACCIDENTS WITH LEAVE<sup>1</sup></b>		
	<b>2017</b>	<b>2018</b>
<b>By region</b>		
Southeast	64	51
South	25	9
<b>By gender</b>		
Men	84	56
Women	5	4
<b>Total</b>	<b>89</b>	<b>60</b>

<sup>1</sup> Only takes employees into account.

<b>NUMBER OF LOST DAYS<sup>1</sup></b>		
	<b>2017</b>	<b>2018</b>
<b>By region</b>		
Southeast	7,611	747
South	6,805	80
<b>By gender</b>		
Men	14,382	807
Women	34	20
<b>Total</b>	<b>14,416</b>	<b>827</b>

<sup>1</sup> Only takes employees into account.

**404-1 |** Our average number of training hours per employee was 54.9 in 2018, 27% lower than in the previous year. This result is a reflection of the transformation process that CPFL University has undergone over the past year. Some of the changes have impacted our numbers because we served fewer people, but provided more critical content – such as leadership programs, which are extremely important for the company but that generate fewer hours of training. Another important aspect was the change in the system that provides support for training, which is still in the stabilization phase, and which has led to significant changes in the processes of the area. All changes were aligned with strategic planning, providing development to our employees in a more robust way.

<b>AVERAGE HOURS OF TRAINING PER EMPLOYEE</b>		
	<b>2017</b>	<b>2018</b>
<b>By gender</b>		
Men	74.3	57.6
Women	80.2	46.1
<b>By job level</b>		
Leadership <sup>1</sup>	21.7	55.9
Other employees	nd	54.8
<b>Total</b>	<b>75.5</b>	<b>54.9</b>

<sup>1</sup> Includes directors, managers, coordinators, supervisors and leaders.

**404-2 |** We do not have a formal process for providing help with career transition or retirement.

**418-1 |** There was no recorded complaint of breach of privacy or loss of CPFL Energia customer data during the year.

**419-1** | The fines applied by the Brazilian Electricity Regulatory Agency (ANEEL) in 2018 to CPFL Energia distributors totaled R\$ 13.5 million. Two factors led to more frequent inspections by regulatory agencies: the revision of decentralization contracts signed between ANEEL and state agencies; and the process of adaptation and modernization of sectorial regulation, which culminated in a series of new obligations to be observed by distributors. The sanctions that resulted in a warning or monetary penalty for our distributors originated in this context of intensification of inspection activities. We continually seek to disseminate knowledge in the business areas regarding power sector legislation and we promote regulatory compliance checks, improving the adherence of processes to the applicable legal and regulatory requirements.

**EU21** | We have Emergency Response Plans (PASEs) so as to be prepared for critical and urgent situations. The plan covers, among other things, the holding of simulation drills to assess the effectiveness of emergency procedures and where there are possibilities for improvement.

**EU25** | With regard to distribution, in 2018 we closed 87 cases and currently have 276 open cases related to accidents with our network, all in the civil arena. In addition to these, CPFL Soluções registered a case, in this same scope and still in progress, related to an accident with materials used in network maintenance.

## EU8 |

### DISTRIBUTORS' INVESTMENT IN R&D (R\$ THOUSAND)<sup>1</sup>

	2016	2017	2018
Energy Efficiency	109	2,190	4,978
Alternative sources of electric power generation	942	9,511	8,013
Metering, billing and combating commercial losses	0	161	3,639
Environment	0	0	0
Operation of electric power systems	4,936	2,553	3,962
Planning of electric power systems	6,903	6,478	3,647
Quality and reliability of electric energy services	149	88	704
Safety	2,639	2,308	2,173
Supervision, control and protection of electrical electric energy systems	1,926	2,365	968
Management Programs <sup>2</sup>	1,674	1,667	4,269
Other	1,475	1,336	1,609
<b>Total</b>	<b>20,753</b>	<b>28,657</b>	<b>33,963</b>

<sup>1</sup> 2017 data restated.

<sup>2</sup> Management programs include values related to the hourly dedication of team members, prospecting activities, dissemination of closed projects and other activities inherent to the R&D program.

### GENERATORS' INVESTMENT IN R&D (R\$ THOUSAND)

	2016	2017 <sup>1</sup>	2018
Energy Efficiency	307	4,201	30
Alternative sources of electric power generation	4,136	4,827	2,841
Thermoelectric generation	1,821	6,200	882
Management of basins and reservoirs	2,012	287	1,749
Environment	940	3,337	1,975
Operation of electric power systems	1,248	1,356	2,522
Planning of electric power systems	4,792	261	576
Supervision, control and protection of electrical electric energy systems	195	780	2,758
Other	493	553	0
Management Programs <sup>2</sup>	9	27	15
<b>Total</b>	<b>15,953</b>	<b>21,829</b>	<b>13,348</b>

<sup>1</sup> The amount in 2017 was higher because of Epasa, which during that year carried out larger investments to comply with the regulatory rules.

<sup>2</sup> Management programs include values related to the hourly dedication of team members, prospecting activities, dissemination of closed projects and other activities inherent to the R&D program.

# GRI CONTENT INDEX

STANDARD GRI	DISCLOSURE	PAGE	OMISSIONS	CORRELATION WITH:	
				GLOBAL COMPACT	SDG
<b>GRI 101   Foundation 2016</b>					
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	<b>Organizational profile</b>				
	102-1   Name of the organization	33	-	-	-
	102-2   Activities, brands, products, and services	13	-	-	-
	102-3   Location of headquarters	91	-	-	-
	102-4   Location of operations	21, 22, 23, 24, 25, 26, 28, 29 and 31	-	-	-
	102-5   Ownership and legal form	33, 34 and 35	-	-	-
	102-6   Markets served	21, 22, 23, 25, 26, 28, 29 and 31	-	-	-
	102-7   Scale of the organization	3, 4 and 5	-	-	-
GRI 102	102-8   Information on employees and other workers	50 and 91	-	6	8
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2016	102-11   Precautionary Principle or approach	73 and 91	-	-	-
	102-12   External initiatives	91	-	-	-
	102-13   Membership of associations	92	-	-	-
	<b>Strategy</b>				
	102-14   Statement from senior decision-maker	8 and 9	-	-	-
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	<b>Ética e integridade</b>				
	102-16   Values, principles, standards, and norms of behavior	11 and 39	-	1 and 10	17
	102-17   Mechanisms for advice and concerns about ethics	39 and 92	-	1 and 10	17

STANDARD GRI	DISCLOSURE	PAGE	CORRELATION WITH:		
			GLOBAL OMISSIONS	COMPACT	SDG
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	102-22   Composition of the highest governance body and its committees	35 and 92	-	-	16
	102-23   Chair of the highest governance body	35 and 36	-	-	16
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	102-25   Conflicts of interest	36	-	-	16
	102-26   Role of highest governance body in setting purpose, values, and strategy	37	-	-	-
	102-27   Collective knowledge of highest governance body	36	-	-	4
	102-30   Effectiveness of risk management processes	36 and 38	-	-	-
	102-35   Remuneration policies	93	-	-	-
	102-36   Process for determining remuneration	93	-	-	-
	<b>Stakeholder engagement</b>				
	102-40   List of stakeholder groups	48	-	-	-
	102-41   Collective bargaining agreements	93	-	3	8
102-42   Identifying and selecting stakeholders	48 and 89	-	-	-	
102-43   Approach to stakeholder engagement	48 and 89	-	-	-	
102-44   Key topics and concerns raised	90	-	-	-	

STANDARD GRI	DISCLOSURE	PAGE	CORRELATION WITH:			
			GLOBAL OMISSIONS	COMPACT	SDG	
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	<b>Reporting practice</b>					
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	102-46   Defining report content and topic Boundaries	89 and 90	-	-	-	
	102-47   List of material topics	90	-	-	-	
	102-48   Restatements of information	89	-	-	-	
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	102-50   Reporting period	89	-	-	-	
	102-51   Date of most recent report	89	-	-	-	
	102-52   Reporting cycle	89	-	-	-	
	102-53   Contact point for questions regarding the report	89	-	-	-	
	102-54   Claims of reporting in accordance with the GRI Standards	93	-	-	-	
	102-55   GRI content index	97, 98, 99, 100, 101, 102, 103 and 104	-	-	-	
	102-56   External assurance	105 and 106	-	-	-	
	GRI Electric utilities sector supplement 2013	EU1   Installed capacity, broken down by primary energy source and by regulatory regime	23	-	-	7
		EU2   Net energy output broken down by primary energy source and by regulatory regime	21	-	-	7
EU3   Number of residential, industrial, institutional and commercial customer accounts		26	-	-	-	
EU4   Length of above and underground transmission and distribution lines by regulatory regime		26	-	-	7	
EU5   Allocation of CO <sub>2</sub> e emissions allowances or equivalent, broken down by carbon trading framework		72	-	-	13	

STANDARD GRI	DISCLOSURE	PAGE	CORRELATION WITH:		
			OMISSIONS	GLOBAL COMPACT	SDG
<b>MATERIAL TOPIC   HUMAN RESOURCES MANAGEMENT</b>					
GRI 103   Management approach 2016 <sup>1</sup>	103-1   Explanation of the material topic and its Boundary	49, 50, 54, 55, 56, 84 and 90	-	-	-
	103-2   The management approach and its components	43, 49, 50, 54, 55, 56 and 84	-	-	-
	103-3   Evaluation of the management approach	16, 17, 49, 50, 54, 55, 56 and 84	-	-	-
GRI 201   Economic performance 2016	201-3   Defined benefit plan obligations and other retirement plans	93	-	-	-
GRI 401   Labor/ Management relations 2016	401-1   New employee hires and employee turnover	94	-	6	8
	401-2   Benefits provided to full-time employees that are not provided to temporary or part-time employees	50 and 95	-	-	-
GRI 404   Training and education 2016	404-1   Average hours of training per year per employee	95	-	6	4 and 8
	404-2   Programs for upgrading employee skills and transition assistance programs	54, 55, 56 and 95	-	6	4 and 8
	404-3   Percentage of employees receiving regular performance and career development reviews	54	-	6	8
GRI Electric utilities sector supplement 2013	EU14   Programs and processes to ensure the availability of a skilled workforce	84	-	-	4 and 8

<sup>1</sup>The management approach refers to all the GRI topics and Sector Supplement listed within the material topic "Human resources management".

## CORRELATION WITH:

STANDARD GRI	DISCLOSURE	PAGE	GLOBAL OMISSIONS	COMPACT	SDG
<b>MATERIAL TOPIC   HEALTH, SAFETY, AND QUALITY OF LIFE</b>					
GRI 103   Management approach 2016 <sup>2</sup>	103-1   Explanation of the material topic and its Boundary	51, 52, 53 and 90	-	-	-
	103-2   The management approach and its components	43, 51, 52 and 53	-	-	-
	103-3   Evaluation of the management approach	16, 17, 51, 52 and 53	-	-	-
GRI 403   Occupational health and safety 2016	403-1   Workers representation in formal joint management-worker health and safety committees	52	-	-	8
	403-2   Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	52 and 95	The data do not cover third parties, whose information are not available because they depend on the contracted companies.	-	3 and 8
	403-3   Workers with high incidence or high risk of diseases related to their occupation	95	-	-	3 and 8
	403-4   Health and safety topics covered in formal agreements with trade unions	95	-	-	8
GRI Electric utilities sector supplement 2013	EU21   Contingency planning measures, disaster/emergency management plan and training programs, and recovery/restoration plans	96	-	-	-
	EU25   Number of injuries and fatalities to the public involving company assets including legal judgments, settlements and pending legal cases of diseases	53 and 96	-	-	-
<b>MATERIAL TOPIC   CORPORATE GOVERNANCE AND ETHICAL CONDUCT</b>					
GRI 103   Management approach <sup>3</sup>	103-1   Explanation of the material topic and its Boundary	33, 34, 35, 36 and 90	-	-	-
	103-2   The management approach and its components	33, 34, 35 and 36	-	-	-
	103-3   Evaluation of the management approach	16, 17, 33, 34, 35 and 36	-	-	-
GRI 205   Anti-corruption 2016	205-1   Operations assessed for risks related to corruption	39	10	-	16
	205-2   Communication and training about anti-corruption policies and procedures	39	10	-	16
	205-3   Confirmed incidents of corruption and actions taken	93	10	-	16
GRI 307   Environmental compliance 2016	307-1   Non-compliance with environmental laws and regulations	92	8	-	16
GRI 406   Non-discrimination 2016	406-1   Incidents of discrimination and corrective actions taken	96	6	-	8 and 16
GRI 419   Socioeconomic compliance 2016	419-1   Non-compliance with laws and regulations in the social and economic area		-	-	16

<sup>2</sup>The management approach refers to all the GRI topics and Sector Supplement listed within the material topic "Health, safety, and quality of life".

<sup>3</sup>The management approach refers to all the GRI topics listed within the material topic "Corporate governance and ethical conduct".

STANDARD GRI	DISCLOSURE	PAGE	CORRELATION WITH:		
			GLOBAL	OMISSIONS COMPACT	SDG
<b>MATERIAL TOPIC   RELATIONSHIP WITH COMMUNITY</b>					
GRI 103   Management approach 2016	103-1   Explanation of the material topic and its Boundary	77, 78, 79, 80, 81, 82, 83 and 90	-	-	-
	103-2   The management approach and its components	43, 77, 78, 79, 80, 81, 82 and 83	-	-	-
	103-3   Evaluation of the management approach	16, 17, 77, 78, 79, 80, 81, 82 and 83	-	-	-
GRI 413   Local communities 2016	413-1   Operations with local community engagement, impact assessments, and development programs	77, 78, 79, 80, 81, 82 and 83	-	1	-
	413-2   Operations with significant actual and potential negative impacts on local communities	77	-	1	10
<b>MATERIAL TOPIC   RELATIONSHIP WITH CUSTOMER</b>					
GRI 103   Management approach 2016 <sup>4</sup>	103-1   Explanation of the material topic and its Boundary	59, 60, 61, 62, 63, 64, 65 and 90	-	-	-
	103-2   The management approach and its components	43, 59, 60, 61, 62, 63, 64 and 65	-	-	-
	103-3   Evaluation of the management approach	16, 17, 59, 60, 61, 62, 63, 64 and 65	-	-	-
GRI 418   Customer privacy 2016	418-1   Substantiated complaints concerning breaches of customer privacy and losses of customer data	95	-	-	16
GRI Electric utilities sector supplement 2013	EU24   Practices to address language, cultural, low literacy and disability related barriers to access and safely use electricity and customer support services	62	-	-	1 and 7
<b>MATERIAL TOPIC   OPERATIONAL EXCELLENCE AND FINANCIAL PERFORMANCE</b>					
GRI 103   Management approach 2016 <sup>5</sup>	103-1   Explanation of the material topic and its Boundary	59, 60, 61, 85, 86, 87 and 90	-	-	-
	103-2   The management approach and its components	59, 60, 61, 85, 86 and 87	-	-	-
	103-3   Evaluation of the management approach	16, 17, 59, 60, 61, 85, 86 and 87	-	-	-
GRI 201   Economic performance 2016	201-1   Direct economic value generated and distributed	87	-	-	8
GRI Electric utilities sector supplement 2013	EU12   Transmission and distribution losses as a percentage of total energy	63	-	-	7, 8, 12 and 13
	EU28   Power outage frequency	61	-	-	7
	EU29   Average power outage duration	61	-	-	7

<sup>4</sup>The management approach refers to all the GRI topics and Sector Supplement listed within the material topic "Relationship with customer".

<sup>5</sup>The management approach refers to all the GRI topics and Sector Supplement listed within the material topic "Operational excellence and financial performance".

STANDARD GRI	DISCLOSURE	PAGE	CORRELATION WITH:		
			GLOBAL OMISSIONS	COMPACT	SDG
<b>MATERIAL TOPIC   ENERGY EFFICIENCY AND EFFICIENT USE OF RESOURCES</b>					
GRI 103   Management approach 2016	103-1   Explanation of the material topic and its Boundary	73 and 90	-	-	-
	103-2   The management approach and its components	73	-	-	-
	103-3   Evaluation of the management approach	16, 17 and 73	-	-	-
GRI 306   Effluents and waste 2016	306-1   Water discharge by quality and destination	93	-	8	6, 12 and 14
	306-2   Waste by type and disposal method	73 and 94	-	8	12
	306-3   Significant spills	93	-	8	6, 12, 14 and 15
	306-4   Transport of hazardous waste	73 and 94	-	8	12
<b>MATERIAL TOPIC   INNOVATION AND LONG-TERM VISION</b>					
GRI 103   Management approach 2016	103-1   Explanation of the material topic and its Boundary	37, 59, 60, 61, 66, 67, 68 and 90	-	-	-
	103-2   The management approach and its components	37, 59, 60, 61, 66, 67 and 68	-	-	-
	103-3   Evaluation of the management approach	16, 17, 37, 59, 60, 61, 66, 67 and 68	-	-	-
GRI Electric utilities sector supplement 2013	EU6   Management approach to ensure short and long-term electricity availability and reliability	21, 22, 27, 59, 60 and 61	-	-	7, 9 and 11
	EU8   Research and development activity and expenditure aimed at providing reliable electricity and promoting sustainable development	66, 67, 68 and 96	-	-	7, 9 and 11
<b>MATERIAL TOPIC   SUSTAINABLE MANAGEMENT OF SUPPLIERS</b>					
GRI 103   Management approach 2016 <sup>6</sup>	103-1   Explanation of the material topic and its Boundary	57, 58 and 90	-	-	-
	103-2   The management approach and its components	57 and 58	-	-	-
	103-3   Evaluation of the management approach	16, 17, 57 and 58	-	-	-
GRI 308   Supplier environmental assessment 2016	308-1   New suppliers that were screened using environmental criteria	57	-	8	-
	308-2   Negative environmental impacts in the supply chain and actions taken	57	-	8	-
GRI 414   Supplier social assessment 2016	414-1   New suppliers that were screened using social criteria	57 and 58	-	2	8
	414-2   Negative social impacts in the supply chain and actions take	57 and 58	-	2	8

<sup>6</sup>The management approach refers to all the GRI topics listed within the material topic "Sustainable management of suppliers".

STANDARD GRI	DISCLOSURE	PAGE	CORRELATION WITH:		
			OMISSIONS	GLOBAL COMPACT	SDG
<b>MATERIAL TOPIC   CONSERVATION OF ECOSYSTEMS AND BIODIVERSITY</b>					
GRI 103   Management approach 2016 <sup>7</sup>	103-1   Explanation of the material topic and its Boundary	74, 75, 76 and 90	-	-	-
	103-2   The management approach and its components	74, 75 and 76	-	-	-
	103-3   Evaluation of the management approach	16, 17, 74, 75 and 76	-	-	-
GRI 304   Biodiversity 2016	304-1   Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	74, 75 and 93	-	8	15
	304-2   Significant impacts of activities, products, and services on biodiversity	74, 75 and 76	-	8	15
	304-3   Habitats protected or restored	74 and 75	-	8	15
	304-4   IUCN Red List species and national conservation list species with habitats in areas affected by operations	75	-	8	15
GRI Electric utilities sector supplement 2013	EU13   Biodiversity of offset habitats compared to the biodiversity of the affected areas	74 and 75	-	-	15
<b>MATERIAL TOPIC   CLIMATE CHANGE</b>					
GRI 103   Management approach 2016 <sup>8</sup>	103-1   Explanation of the material topic and its Boundary	69, 70, 71, 72 and 90	-	-	-
	103-2   The management approach and its components	69, 70, 71 and 72	-	-	-
	103-3   Evaluation of the management approach	16, 17, 69, 70, 71 and 72	-	-	-
GRI 201   Economic performance 2016	201-2   Financial implications and other risks and opportunities due to climate change	71	-	7	13
GRI 305   Emissions 2016	305-1   Direct (Scope 1) GHG emissions	70 and 93	-	7 and 8	13
	305-2   Energy indirect (Scope 2) GHG emissions	70 and 93	-	7 and 8	13
	305-3   Other indirect (Scope 3) GHG emissions	70 and 93	-	7 and 8	13
	305-4   GHG emissions intensity	70	-	8	13

<sup>7</sup>The management approach refers to all the GRI topics and Sector Supplement listed within the material topic "Conservation of ecosystems and biodiversity".

<sup>8</sup>The management approach refers to all the GRI topics listed within the material topic "Climate change".

## **STATEMENT OF SUSTAINABILITY ACTIVITIES DETAILED IN “REPORT 2018” OF CPFL ENERGIA GIVEN BY SGS ICS CERTIFICADORA LTDA. (SGS).**

### **NATURE AND SCOPE OF ASSURANCE**

The SGS was hired by CPFL Energia to carry out the third-party assurance of their Sustainability Report 2018. The assurance scope, based on assurance methodology of sustainability reports of SGS, comprises the disclosure verification under GRI standards in 2018.

The information provided in “SUSTAINABILITY REPORT 2018” and its presentation is a sole responsibility of CPFL management structure. The SGS is not involved in the preparation of any material, including the in the said report, such as risk analysis, materiality tests and other critical issues that may affect severally the CPFL business. We are liable for giving our opinion of the GRI disclosures and their texting, data, charts and statement within the assurance scope in order to keep the CPFL stakeholders informed.

The SGS Group has developed a set of assurance protocols for Sustainability Communication based on the best practices provided in GRI Sustainability Reporting Standards and the assurance standard - ISAE3000. Such protocols offer different assurance levels depending on context and capacity of organization, in this case CPFL.

This report was assured considering our protocols to assess the content authenticity and its alignment with the requirements of GRI Sustainability Reporting Standards, (Universal Standards 101, 102 and 103) and the requirements of Topic-specific Standards (GRI 200, GRI 300 and GRI 400) according to the material issues identified by CPFL through our process detailed herein. Furthermore, the sectorial disclosures - GRI G4 Electric Utilities. Based on this context, the “SUSTAINABILITY REPORT 2018” is considered as “Core option.

The assurance process comprised (i) the disclosure review, information and data provided in sustainability draft (ii) interviews with strategic employees, both to understand the report data and to understand the management process connected with the material issues and (ii) desktop review of the documents forwarded by CPFL to SGS. The CPFL accounting information and or detailed in reference list of “SUSTAINABILITY REPORT 2018” were not assessed in this assurance process.

### **IMPARTIALITY AND COMPETENCE STATEMENT**

The SGS Group is global lead in inspection, analysis and verifications services, operating in more than 140 countries and rendering services that includes management system certification, audits and trainings on quality, environmental, social and ethic segments, sustainability assurance reports and greenhouse gases verification. The SGS attests your independence against CPFL, stating that is exempt from interest conflict with the organization, their subsidiary and stakeholders.

The assurance team was composed according to members’ expertise, experience and competence for this activity, the team is composed of:

- Auditor Líder de Asseguração de Relatório de Sustentabilidade, Auditor Líder de programas Socioambientais, Auditor Líder de Gases de Efeito Estufa (GEE) e Auditor Líder da ISO 14001.
- Lead Auditor for Sustainability Assurance Report, Lead auditor for socioenvironmental programs, lead auditor for greenhouse gases and lead auditor for ISO 14001.
- Auditor for Sustainability Assurance report, Greenhouse gases (GHG) inspector, Auditor for Socioenvironmental and Energy Projects.
- Auditor for Sustainability Assurance Report, lead Auditor for

## ASSURANCE OPINION

A broad assurance was ordered, and the work carried out was enough and appropriate to a robust assurance. Regarding the verification performed on methodology, process and data provided by CPFL, we attest the information and data provided on disclosures of "SUSTAINABILITY REPORT 2018" are reliable and a true and accurate representation of the sustainability activities performed by CPFL in reference year 2018. The assurance team thinks the report can be used by company's stakeholders as part of their processes of company evaluation. The organization selected the Core Option, which meets their needs.

In our opinion, based on preliminary report that was checked at the company head office in Campinas and on material provided by CPFL, the report content meets fully the GRI Standard requirements including those from sectorial disclosures - Electric Utilities.

## RECOMMENDATIONS, FINDINGS AND CONCLUSIONS OF ASSURANCE

The disclosures of CPFL Report, "SUSTAINABILITY REPORT 2018", is aligned with Sustainability Reporting Standards, (Universal Standards 101, 102 and 103) and with the requirements of Topic-specific Standards (GRI 200, GRI 300 and GRI 400), Core Option. It is also important to declare that the material aspects and their limits were properly set according to Reporting Principles and indicated over the report.

We recognize that over the past years of assurance of the Sustainability Report disclosures, the CPFL has applied their best efforts to enhance their internal activities in order to add sustainable value to the company.

In terms of contribution to improvement and development of future sustainability reports and to more-effective assurance process, we recommend to CPFL that:

1. Disclose the goals and targets for all material issues. In our opinion the report should

be used as information source of sustainability for the stakeholders and grounding their decision making

2. Promote better the disclosure and take advantage internally of the thoughts taken from new materialization process performed along with university in order to mature the contact points to the stakeholder for future progress toward the sustainability.
3. For the reporting context, keep searching for a summarized report, without poor content. Try to highlight the relevant gains of the sustainability area that consolidate itself against the management and strategy every year.
4. Keep consistent the use of tenth throughout the report.

Finally, SGS congratulates CPFL for the initiative of carrying out the assurance of their report, for the historical commitment to sustainability and wish the significant advances on this matter are kept over the coming years.

**March 20th, 2019**

**Executed by and on behalf of SGS**

**Fabian Peres Gonçalves**  
**Business Manager – Sustainability**  
**Report**



**Luciana Ap. F. Spinola**  
**Lead Auditor for Sustainability**



## Corporate information and credits

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#### **GENERAL DIRECTION**

Vice Presidency of Legal Affairs  
and Institutional Relations  
Sustainability and Institutional Relations Department  
Corporate Communications Department

#### **GATHERING OF INFORMATION**

Employees of the CPFL Energia Group  
(subsidiaries and affiliates)

#### **CONTENT, GRI CONSULTING, DESIGN AND INPHOGRAPHIC**

usina82

#### **PHOTOGRAPHY**

CPFL Energia Image Bank

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